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ABSTRACT

The annotated bibliography on learning disabilities research contains approximately 100 abstracts and associated indexing information for documents, published from 1963 through 1973, which have been selected from the computer file of the Information Center of the Council for Exceptional Children. It is explained that the abstracts were chosen according to criteria of availability of document to user, current applicability, information value, author reputation, and classical content. Preliminary information is given to explain how to read the abstract (a sample abstract is included for identification of abstract parts), how to use the author and subject indexes, how to order documents through the ERIC Document Reproduction Service (EDRS), and how to order "Exceptional Child Education Abstracts" in which the abstracts are originally published. Also provided are a list of terms searched to compile the bibliography and a list of journals from which articles were abstracted. References included treat of aspects such as identification of children with perceptual motor dysfunction, reading difficulties, and parent attitudes. (MC)

ED 090707

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LEARNING DISABILITES-RESEARCH

A Selective Bibliography

November, 1973

CEC Information Center on Exceptional Children
An ERIC Clearinghouse
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

Exceptional Child Bibliography Series No. 616

EC 061 504

The work presented or reported herein was performed pursuant to a grant from the Bureau of Education for the Handicapped, US Office of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the US Office of Education and no official endorsement by the US Office of Education should be inferred.

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With a grant from the US Office of Education, the CEC Information Center was established at The Council for Exceptional Children to serve as a comprehensive source of information on research, instructional materials, programs, administration, teacher education, methods, curriculum, etc. for the field of special education. The Center functions as the Clearinghouse on Exceptional Children in the Educational Resources Information Centers (ERIC) program and also as a member center in the Special Education IMC/RMC Network. In addition, the CEC Center's program includes a commitment to a concentrated effort towards the development of products which will interpret research results into educational methods and practices.

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The *Exceptional Child Bibliography Series* was initiated by the CEC Information Center to answer the need for rapid responses to specific requests for information. The volume of information requests received by the Center is analyzed and used as a guide in preparing special topic bibliographies in the field of exceptional child education. Abstracts contained in the bibliographies are drawn from the computer file of abstracts which represents the CEC Information Center's complete holdings as of the date indicated on each bibliography.

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Documents with an ED number and EDRS availability indicated may be purchased from the ERIC Document Reproduction Service (EDRS). For your convenience an order form is provided on the back cover of this bibliography.

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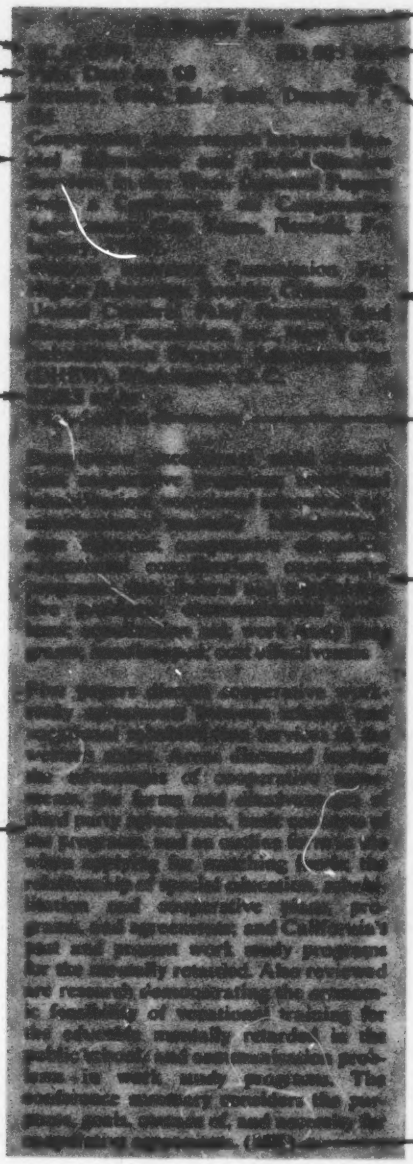

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Summary

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Abstractor's initials

*NOTE: EDRS mf indicates microfiche reproduction only.

INDEXING TERMS SEARCHED

Indexing terms used to retrieve information on *Learning Disabilities Research* from the Center's computer file of abstracts are listed alphabetically below:

Aphasia
Dyslexia
Exceptional Child Research
Eye Hand Coordination
Language Handicapped
Lateral Dominance
Learning Disabilities
Minimally Brain Injured
Motor Development
Perceptual Motor Coordination
Perceptual Motor Learning
Perceptually Handicapped
Psychomotor Skills
Reading Difficulty

JOURNALS USED

Abstracts of articles from the following periodicals appear in this bibliography:

Child Development, University of Chicago Press, 5801 Ellis Avenue, Chicago, Illinois 60637

Education and Training of the Mentally Retarded, Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

Exceptional Children, Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

Journal of Child Psychology and Psychiatry, Fairfax Park, Elmsford, New York 10523

Journal of Learning Disabilities, 5 North Wabash Avenue, Chicago, Illinois 60602

Journal of Reading, 6 Tyre Avenue, Newark, Delaware 19711

Journal of School Psychology, 51 Riverside Avenue, Westport, Connecticut 06880

Journal of Special Education, 3515 Woodhaven Road, Philadelphia, Pennsylvania 19154

Pediatrics, American Academy of Pediatrics, Evanston, Illinois 60204

The Reading Teacher, International Reading Association, 6 Tyre Avenue, Newark, Delaware 19711

The abstracts in this bibliography were selected from *Exceptional Child Education Abstracts*, Volumes I-V, No. 1.

ABSTRACTS

ABSTRACT 10517

EC 01 0517 ED 023 213
Publ. Date Sep 66 41p.
Kershner, John R.; Bauer, David H.
Neuropsychological and Perceptual-Motor Theories of Treatment for Children with Educational Inadequacies.
Pennsylvania State Department of Public Instruction, Harrisburg, Bureau of Research
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; perception; learning; child development; learning theories; adaptation level theory; models; neurological organization; etiology; mentally handicapped; psychoeducational processes; perceptual motor learning; perceptual development; space orientation; Glenn Doman; Carl H. Delacato; Newell C. Kephart

Two divergent approaches to the treatment of children with nonprogressive brain injury (the medical or neuropsychological and the educational or perceptual-motor) are discussed and compared by treatment rationale, models of the perceptual process, etiology, and organization theory. A guide to a comprehensive theory of development, based on stimulation of the central nervous system, is presented; and, by placing the two theories in perspective, a treatment rationale is derived from the similarities of their methods. The design of a theoretical model based on the latest neurological findings is suggested. Recommendations for research, a pilot study on the neuropsychological method, a developmental profile chart, and a 33-item bibliography are included. (DF)

ABSTRACT 10573

EC 01 0573 ED 021 357
Publ. Date Aug 67 67p.
Best, Helen and Others
The Effect of Structured Physical Activity on the Motor Skill Development of Children with Learning Disabilities (Minimal Brain Dysfunction).
Memphis State University, Tennessee
EDRS mf,hc

Descriptors: exceptional child research, learning disabilities; physical education; minimally brain injured; physical activities; motor development; skill development; tests; psychomotor skills; perceptual motor coordination; perceptual motor learning; children; special programs; Johnson Test of Motor Skill Development

Students in 24 perceptual development classes for the minimally brain injured were studied to determine the effect of structured physical activity on motor skill development, to compare this effect with the effect of unstructured activity, and to determine the effect of an increased amount of time of physical activity. The Johnson Test of Motor Skill Development was administered before and after an 8-week program. The experimental group of classes was given structured physical activities; the control group had regular play periods. Results indicated a statistically significant difference between the experimental and control groups (p less than .01) with increased motor skill development occurring in the experimental group. Schedules and diaries recording structured activities used in the experimental group are included. The Johnson Test, four tables, four illustrations, and a 19-item bibliography are provided. (LE)

ABSTRACT 10609

EC 01 0609 ED N.A.
Publ. Date Nov 67 6p.
Nolen, Patricia A. and Others
Behavioral Modification in a Junior High Learning Disabilities Classroom.

EDRS not available
Exceptional Children; V34 N3 P163-8 Nov 1967

Descriptors: exceptional child research; learning disabilities; behavior; programed instruction; teaching methods; junior high school students; behavior change; individualized instruction; reinforcement; skill development; academic achievement; reading; mathematics; operant conditioning

Eight students with serious learning and behavior disorders were enrolled in the junior high classroom of the University of Washington Experimental Education Unit. Completely individual programs were organized on a behavioral basis. Activities known to be highly interesting to the students served as reinforcement contingencies to reinforce academic activities. Significant academic gains occurred over the 24-week teaching period. Behavioral changes did not appear limited to accelerated academic response rates, suggesting that broader use of management techniques may be feasible. One figure and 11 references are provided. (JW)

ABSTRACT 10761

EC 01 0761 ED 024 163
Publ. Date Apr 67 113p.
Sapir, Selma G.
A Pilot Approach to the Education of First Grade Public School Children with Problems in Bodily Schema, Perceptual-Motor and/or Language Development. Final Report.
Columbia University, New York, New York, Teachers College;
Union Free School District Number 1, Scarsdale, New York
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-32-42-0280-6005
BR-6-8275

Descriptors: exceptional child research; learning disabilities; perception; language; teaching methods; grade 1; visual perception; language development; academic achievement; auditory perception; discrimination learning; perceptual motor learning; expressive language; experimental programs; perceptual development; screening tests; sensory integration; experimental teaching

Fifty-four kindergarten children were screened with the Sapir Developmental Scale to highlight deficiencies in bodily schema, perceptual motor skills, and language development, and were matched in groups of three by score, chronological age, and sex with one of the three acting as control. Three first grade classes were organized as follows: one experiemntal with 12 deficit children using a deficit centered training curriculum; one experimental with 24 normal children using a traditional curriculum; one control with six deficit children and 12 normal children using a traditional curriculum. The children were given a battery of psychodiagnostic tests in the fall and spring of the first grade. The results clearly favored the deficit children in the experimental class with significant differences in mean change in Wechsler Intelligence Scale for Children scores (p equals .05), visual perception and language functioning (p equals .01), and in perceptual motor skills (p less than .05). Important changes were also noted for the same groups in auditory-visual integration and visual perception, and in language development, particularly in expressive areas. Little difference was seen in the measurement of academic achievement. Performance favored the normal experimental group but without significant differences. (Author/SN)

ABSTRACT 10842

EC 01 0842 ED 003 854
Publ. Date 64 22p.
Lewis, Edward R.
Initial Teaching Alphabet (I.T.A.) for Instruction of Reading Disability Cases.
San Jose State College, California
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
CRP-S-145

Descriptors: exceptional child research; reading; learning disabilities; teaching methods; instructional materials; remedial reading clinics; reading materials; methods research; reading failure; reading instruction; reading development; comparative analysis; remedial reading; comparative education; foreign countries; orthographic symbols; alphabets; San Jose; California; England

British experimental usage of Initial Teaching Alphabet (ITA) materials and

procedures for instruction of reading disability cases was studied to determine if ITA methods and materials could be similarly used in a San Jose reading clinic. The investigator made observations in England of quality, format, concepts, and use of language in the ITA material. Findings were discussed under nine categories: ITA materials, pupil selection for ITA remedial work, remedial techniques with ITA, individual or group methods for use with ITA, phonetic or whole word approaches, diagnosis in ITA remediation, the use of supplementary materials, extent of teacher training, and ITA and the reading clinic. Generally ITA has had beneficial effects with children when a history of reading failure has existed. It was concluded that ITA materials available in England could be used in the United States with minor modifications in isolated books. However, additional materials which are not yet available in England include high interest, transitional, skill building, and supplementary materials, as well as ITA reading manuals. (JM)

ABSTRACT 10914

EC 01 0914 ED 026 757
Publ. Date Apr 63 144p.
An Exploratory Study of Children with Neurological Handicaps in School Districts of Los Angeles County.
Los Angeles County Superintendent of Schools, California
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; grouping (instructional purposes); neurologically handicapped; sex differences; minimally brain injured; clinical diagnosis; special classes; attendance; regular class placement; parent participation; intelligence tests; student evaluation; academic achievement; teacher attitudes; student attitudes; medical evaluation

A 6-year field study project was undertaken to try out some patterns of special education with neurologically handicapped children. Three phases emphasized these objectives: feasibility, class size, pupil safety, approval, incidence, referral, diagnosis, placement, curriculum, treatment, evaluation, teacher qualifications, parent reactions, expansion, demonstration, and research. In phase 2, 116 neurologically impaired children were placed in either special (64) or regular (52) classes. The special class group generally contained older (1/2 year) and more severe cases; boys outnumbered girls 7 to 1. After a 3-year attendance in a special class, 12 students were recommended for return to regular class (out of 19) while 15 out of 19 children in the regular classes were felt to need special class placement. Steady attendance for 2 years was in favor of special class students (86% to 40.4%). Parents of children in special classes attended meetings concerning their children more frequently than parents of regular class children (52% to 7%). Special class students seemed favored in the few cases of academic comparison although the children were about 3 years academically retarded. Recommendations were made for future research. (RP)

ABSTRACT 21813

EC 02 1813 ED N.A.
Publ. Date Apr 70 8p.
Tarnopol, Lester
Delinquency and Minimal Brain Dysfunction.
EDRS not available
Journal of Learning Disabilities; V3 N4 P200-7 Apr 1970

Descriptors: exceptional child research; delinquency; minimally brain injured; learning disabilities; intelligence quotient; culturally disadvantaged; minority groups

To determine if delinquent school dropouts from minority group ghettos contained a higher percentage of brain dysfunction than the total population, 102 male subjects were studied. Full results have not yet been analyzed, but preliminary indications are that 39% had significant difference between verbal and performance IQ scores; 58% were reading below the sixth grade level; the mean grade of dropout was 10.5; 64% were below sixth grade level on understanding directions; and most of their visual motor problems were related to visual motor integration and motor coordination. Early indications seem to support the conclusion that the minority group has a significant degree of minimal brain damage related to learning disabilities. (JM)

ABSTRACT 22069

EC 02 2069 ED 034 669
Publ. Date Apr 69 14p.
Kasdon, Lawrence M.
Causes of Reading Difficulties--Facts and Fiction.
EDRS mf,hc
Paper Presented at the International Reading Association Conference (Kansas City, Missouri, April 30-May 3, 1969).

Descriptors: exceptional child research; dyslexia; interdisciplinary approach; learning difficulties; parent attitudes; reading difficulty; reading failure; reading processes

The disagreement on terminology used to describe reading difficulties and to classify reading underachievers is illustrated. Some of the research findings on physical, intellectual, emotional, and educational factors which cause reading difficulty are described, with emphasis on replying to questions asked by parents and on clarifying some misconceptions held by lay persons and educators. It is emphasized that the causes of reading failure rarely occur in isolation, and therefore the study of the interaction effect of several factors becomes essential. The typical ex post facto studies of learners from 9 to 20 years of age work from effect to find causes. It is suggested that longitudinal studies, particularly when conducted by an interdisciplinary team, would be much more useful in providing accurate information about causes of reading failure. A bibliography is included. (CM)

ABSTRACT 22130

EC 02 2130 ED N.A.
Publ. Date Jun 70 3p.
Swanson, Merlyn S.; Jacobson, Anita
Evaluation of the S.I.T. for Screening Children with Learning Disabilities.
EDRS not available
Journal of Learning Disabilities; V3 N6 P318-20 Jun 1970

Descriptors: exceptional child research; learning disabilities; test validity; identification; verbal ability; Slosson Intelligence Test

The purpose of the study was to test the validity of the Slosson Intelligence Test (SIT) as a screening instrument in the identification of children with learning disabilities. The SIT scores of 64 suburban second-graders referred as having learning problems were compared with their scores obtained on the Wechsler Intelligence Scale for Children (WISC). The SIT scores correlated significantly with the WISC Verbal I.Q. (equals .64) but not with the Performance I.Q. (equals .10), suggesting that the SIT is essentially a measure of verbal intelligence for such subjects. (Author)

ABSTRACT 22185

EC 02 2185 ED 037 837
Publ. Date 24 Aug 69 69p.
Rosner, Jerome and Others
The Identification of Children with Perceptual-Motor Dysfunction; A Study of Perceptual-Motor Dysfunction among Emotionally Disturbed, Educable Mentally Retarded and Normal Children in the Pittsburgh Public Schools.
Pittsburgh Univeristy, Pennsylvania, Learning Research and Development Center;
Pittsburgh Public Schools, Pennsylvania, Division of Mental Health Services
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; screening tests; perceptual motor learning; test construction; test validity; behavior rating scales; educable mentally handicapped; emotionally disturbed; socially maladjusted; auditory perception; body image; perceptual development; sensory integration; motor development; visual perception; Rosner Perceptual Survey; Rosner Richman Perceptual Survey

The Rosner Perceptual Survey (RPS) and the Rosner-Richman Perceptual Survey (RRPS) were developed for screening perceptual motor dysfunction. 17 subtests of visual motor and auditory motor functions, general motor skills, self awareness, and integrative function; the RRPS, intended for teacher or paraprofessional use, included the same items except optometric ones and ones requiring special equipment. Validation was conducted with 50 regular, 50 educable mentally handicapped, and 50 emotionally disturbed and socially maladjusted elementary school students; cross validation was accomplished with more children from each group. External validity

was determined by a behavior rating scale based on correlates of learning disabilities. Variance between scores made by the regular and the other students was significant (p less than .005). Further findings were as follow: RPS items intercorrelated (for 28 of its 30 items p less than .005); the RPS and RRPS correlated for all three groups (p less than .005); the RPS and the behavior rating scale correlated (p less than .001). Appendixes provide the behavior rating scale and manuals and supplementary data analysis for the RPS and RRPS. (JD)

ABSTRACT 22189

EC 02 2189 ED 037 841
Publ. Date 68 25p.
Patterson, Natalie E., Comp.
Multi-Sensory Approach to Reading Disabilities.
Fayette County Public Schools, Lexington, Kentucky, Division of Instructional Services
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; identification; intervention; remedial reading programs; reading difficulties; language arts; resource teachers; remedial reading; motor development; referral; teaching methods; instructional materials; minimally brain injured; dyslexia; emotional problems

Educational diagnostic methods were used to screen children evidencing minimal brain damage, dyslexia, or emotional problems. Of 750 children, 15% had such difficulties; they received a highly structured language arts program in homogeneous transition groups while remaining in their usual homeroom. In addition, they participated in motor training and a rhythm and patterning program. Academic gains resulted in various areas; reading ages increased an average of 1.7. Appendixes, comprising about two-thirds of the document, provide the referral form and an explanation of it along with descriptions of methods and materials used in the three programs. (JD)

ABSTRACT 22191

EC 02 2191 ED 037 843
Publ. Date 69 243p.
Benton, Arthur L., Ed.
Contributions to Clinical Neuropsychology.
EDRS not available
Aldine Publishing Company, 529 South Wabash Avenue, Chicago, Illinois 60605 ($8.50).

Descriptors: exceptional child research; neurologically handicapped; psychophysiology; aphasia; neurology; neurological defects; medical research; research reviews (publications); behavior patterns; anatomy; pathology

Seven aspects of neuropsychology are discussed including modern trends in neuropsychology by Klaus Poeck, the behavioral effects of commissural section by George Ettlinger and Colin B. Blakemore, neuropsychological studies of phantom limbs by Sidney Weinstein, and problems in the anatomical understanding of aphasias by Norman Geschwind. Also included are articles on some unanswered questions of constructional apraxia by Arthur L. Benton, a reappraisal of protopathic and epicritic sensation by Josephine Semmes, and a review of recent evidence in auditory agnosia by Luigi A. Vignolo. References, a name index, and a subject index are provided. (JM)

ABSTRACT 22217

EC 02 2217 ED 037 869
Publ. Date 69 27p.
Sapir, Selma
Learning Disability and Deficit Centered Classroom Training.
Columbia University, New York, New York, Teachers College
EDRS mf,hc
RR-V1-N2

Descriptors: exceptional child research; learning disabilities; sensory training; academic achievement; student evaluation; intelligence; perceptual development; perceptual motor coordination; psycholinguistics; language ability; sex differences; minimally brain injured; teaching methods

Eighteen first grade children (10 boys and eight girls, IQ's 91 to 128) who evidenced a developmental deficit on the Sapir Developmental Scale were placed in one of two groups. Twelve children in an experimental group comprised a self contained class and were given deficit centered training. The six in the control group were placed with 12 children without problems and given the traditional curriculum without deficit centered training. In the deficit centered program emphasis was placed on sensory stimulation in a carefully planned environment. The experimental group did significantly better on many, but not all of the intellectual, perceptual, and language tests; but data on academic achievement failed to show significant differences. Two factors are noted which might have contributed to the results: children who develop unevenly may have a distinctive learning pattern and process information differently, and neurological impairment could have a negative effect on academic performance regardless of WISC IQ. These factors and questions raised by the study are discussed. (RJ)

ABSTRACT 22410

EC 02 2410 ED N.A.
Publ. Date 69 178p.
Thomas, Evan W.
Brain-Injured Children.
EDRS not available
Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 ($7.00).

Descriptors: exceptional child research; minimally brain injured; neurological defects; neurology; medical evaluation; medical treatment; cerebral palsy; dyslexia; mentally handicapped; epilepsy; neurological organization; behavior problems; Delacato Method

Past practices, functional diagnosis, management techniques, and treatment methods concerning brain injured children are discussed. The problems with old approaches and the need for new techniques are presented for brain injury, cerebral palsy, the pathology of cerebral palsy, its incidence and prevalence, mental retardation, epilepsy, behavioral disorders, and dyslexia. The advantages of a functional approach are included in descriptions of the controversy over brain injury as a diagnosis, the background and interpretation of neurological organization, the evaluation of neurological functions, and the principles and methods of Doman-Delacato therapeutic programs. Also included is an article by Edward B. LeWinn on evaluating the results of treatment of brain injury in children. (JM)

ABSTRACT 22437

EC 02 2437 ED 033 757
Publ. Date Sep 68 21p.
Ayres, A. Jean
Effect of Sensorimotor Activity on Perception and Learning in the Neurologically Handicapped Child. Final Progress Report.
University of Southern California, Los Angeles
Children's Bureau (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; academically handicapped; behavior patterns; elementary school students; learning disabilities; neurological defects; perceptual motor coordination; perceptual motor learning; sensory training; academic achievement

Because some learning disorders in children may be associated with perceptual-motor dysfunction, the study tested the effects of sensorimotor treatment on learning disorders and explored the nature of neurodevelopmental disorders. In Part One, 64 neuromuscular, perceptual, and cognitive measurements made on 36 educationally handicapped children with normal IQ's were subjected to Q-technique factor analysis. The two major patterns of deficits associated with low academic achievement were auditory, language, and sequencing, and postural and bilazeral integration. Part Two sought syndromes of dysfunction from an R-technique factor analysis of perceptual-motor test scores. Q-analysis subjects and additional children with academic problems were tested. Emerging factors represented types of statistical associations among behavioral parameters apt to be affected by neurodevelopmental disorders. Part Three hypothesized that educationally handicapped children in special classes receiving sensorimotor training show a greater change in perceptual-motor, language, and academic achievement scores than children receiving the equivalent amount of additional classroom instruction. Test scores failed to support this hypothesis. The major contribution of the entire project was the identification of postural and bilateral integration deficit which interfered with learning. (JF)

ABSTRACT 22539

EC 02 2539 ED 038 809
Publ. Date Nov 69 92p.
Hewett, Frank M. and Others

The Santa Monica Project: Demonstration and Evaluation of an Engineered Classroom Design for Emotionally Disturbed Children in the Public School; Phase Two: Primary and Secondary Level. Final Report.
Santa Monica Unified School District, California
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-0-8-071298-2799(032)
BR-7-1298

Descriptors: exceptional child research; behavior problems; learning disabilities; behavior change; academically handicapped; reading; regular class placement; special classes; classroom environment; academic achievement; behavior rating scales; reinforcement; learning readiness; classroom organization; class management; Elementary and Secondary Education Act Title III Project; engineered classrooms

Following its initial year, an engineered classroom for educationally handicapped (EH) children was replicated and extended. Evaluation indicated that the program could effectively increase emphasis on reading and include both primary and secondary students. Reintegration in the regular classes for EH children could be done on both a gradual and compulsory basis; the difficulty was in accurately assessing a given child's readiness for limited or total reintegration. The preacademic focus of the primary classes (ages 6 to 8) was validated in that a majority of subjects from the 1st year who had returned to regular classes were average or above in their functioning after 1 or 2 years in the program. Also EH children in the engineered classrooms outdistanced children in regular EH classes and approached or exceeded normal controls academically and behaviorally. Appendixes describe the engineered classroom and its dissemination and provide a behavior problem checklist and instructions for a frequency count of deviant behavior. (Author/JD)

ABSTRACT 22540

EC 02 2540 ED 038 810
Publ. Date Jun 69 84p.
Freund, Janet W.
Survey and Recommendations on Learning Disabilities for Township High School District No. 113, Highland Park, Illinois.
Township High School District No. 113, Highland Park, Illinois
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; educational programs; school services; research reviews (publications); resource teachers; intervention; program planning; identification; learning characteristics; program effectiveness; program administration; special classes

Seven of 14 high school students with learning disabilities were placed in a resource room. Results were mixed, but staff affirmed the need for a special program. Learning disability programs in the elementary schools underlying the high school were proposed. Also, programs at 12 other high schools were reviewed along with the literature on the nature and elements of learning disabilities and on methods of intervention. Areas for research were suggested and specialists were consulted regarding a proposed learning action-research center. The resulting recommendations for the center concerned diagnosis, remediation, facilities and materials, staff, coordination, demonstration, and community and university involvement. (JD)

ABSTRACT 22979

EC 02 2979 ED N.A.
Publ. Date Sum 70 3p.
Charlton, Bette
Acceptance Plus Structure Yields Learning.
EDRS not available
Exceptional Children; V36 N10 P763-5 Sum 1970

Descriptors: exceptional child research; minimally brain injured; reading instruction; reading programs

A language arts developmental program for three boys (two eight years and one nine years old) with minimal brain dysfunction was constructed to study a teaching approach emphasizing support and understanding given by the teacher (acceptance) and a highly structured program. A permissive atmosphere was established, the students' trust and cooperation were obtained, and structured work initiated with each boy individually. Results showed improved reading, self-confidence, ability to work alone, and ability to get along with each other. Each boy changed enough that further study of this approach is urged for teaching children with minimal brain dysfunction. (KW)

ABSTRACT 23052

EC 02 3052 ED N.A.
Publ. Date Aug 70 8p.
Skubic, Vera; Anderson, Marian
The Interrelationship of Perceptual-Motor Achievement, Academic Achievement and Intelligence of Fourth Grade Children.
EDRS not available
Journal of Learning Disabilities; V3 N8 P413-20 Aug 1970

Descriptors: exceptional child research; low achievers; intelligence factors; perceptual motor coordination; academic achievement; intelligence quotient; elementary school students; high achievers; Stanford Achievement Test; California Test of Mental Maturity

The relationship of perceptual-motor achievement, academic achievement, and intelligence was investigated. Eighty-six fourth grade boys and girls of normal intelligence were studied. On the basis of performance on the Stanford Achievement Test (SAT), 41 pupils were designated as low achievers and 45 were designated as high achievers. The California Test of Mental Maturity (CTMM) and a perceptual-motor battery consisting of 11 tests were also administered to the children. Scores on the perceptual-motor battery for all children correlated significantly with their CTMM and SAT scores. The combined group of male and female high achievers performed significantly better than the low achiever group on all subtests of the CTMM including IQ. They also scored significantly better on six of the 11 perceptual-motor tests. On the remaining five tests, no differences were noted. (Author)

ABSTRACT 23387

EC 02 3387 ED N.A.
Publ. Date May 70 6p.
Abrams, Jules C.
Parental Dynamics--Their Role in Learning Disabilities.
EDRS not available
Reading Teacher; V23 N8 P751-60 May 1970

Descriptors: exceptional child research; learning disabilities; parent role; parent child relationship; parent attitudes; dyslexia; case records; minimally brain injured; parent education; parent counseling

The perceptions of parents toward a child with severe learning disabilities but no obvious physical problems is discussed. Reactions of parents in two case studies involving brain-damaged and dyslexic children are described. It is noted that the mother of a brain-damaged child frequently perceives him as a threat to her own narcissism, and that infinite fantasies and guilt are common for both parents. Resulting behaviors of parents include over-protection, over-indulgence, denial, and projection. The importance of teaching parents about the nature of the disability is stressed. It is concluded that parental dynamics play a very important role in the formulation or exacerbation of any learning disability, and in understanding children whose disabilities have no specific psychogenic etiology. (GD)

ABSTRACT 23445

EC 02 3445 ED 041 413
Publ. Date Sep 69 27p.
Tolor, Alexander
An Evaluation of a New Approach in Dealing with High School Underachievement. Final Report.
Fairfield University, Connecticut
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf,hc
OEG-1-9-080040-0008(010)
BR-8-A-040

Descriptors: exceptional child research; learning disabilities; underachievers; expectation; reinforcement; motivation; high school students; academic achievement; computer assisted instruction; study skills; tutoring; internal-external expectation; Rotter's Internal-External (I-E) Scale

A study was undertaken to determine the degree and nature of expectancy of reinforcement in high school underachievers, and to evaluate a method for modifying the internal versus external expectancies which relate to motivation for achievement and attainment of success. A com-

puter instructional program was used to impart immediate reinforcement for the subject's responses, to show that his behavior, over which he has direct control, determines his success or failure. Underachievers were identified, and 16 were randomly assigned to a tutorial group, 16 to a study skill group, and 17 to the computer group for an eight-week period. It was found that sex and class level are important in determining the external expectancy tendency of underachievers. All three experimental approaches resulted in increased internality, without significant differences among the groups. Also, none of the approaches resulted in a significant change in grades earned by the underachievers. Rotter's internal-external (I-E) scale is included. (KW)

ABSTRACT 30339

EC 03 0339 ED N.A.
Publ. Date 32 205p.
Monroe, Marion
Children Who Cannot Read.
EDRS not available
University of Chicago Press, 5750 Ellis Avenue, Chicago, Illinois 60637 ($5.50).

Descriptors: exceptional child research; learning disabilities; reading difficulty; reading diagnosis; educational diagnosis; measurement techniques; reading tests; case studies; remedial reading; remedial instruction; diagnostic tests

Accompanied with numerous research findings and statistical data, the text presents analyses of reading disabilities and the use of diagnostic tests in the instruction of retarded readers. The quantitative measurement of reading defects is examined, and typical individual charts showing discrepancies between reading and other accomplishments are provided. Data on typical individual profiles of errors and on causative factors are analyzed. Methods and results of various remedial instruction designs are reported, and typical case studies involving diagnosis and treatment are presented. A related bibliography, directions for giving tests, and illustrative charts and tables are also included. (RD)

ABSTRACT 30355

EC 03 0355 ED N.A.
Publ. Date 70 137p.
Critchley, MacDonald
The Dyslexic Child.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 ($6.50).

Descriptors: exceptional child research; learning disabilities; dyslexia; neurology; etiology; clinical diagnosis; reading difficulty; perception

Developmental dyslexia is explored from a neurological point of view. The growth of knowledge about dyslexia is traced, and conflicting ideas on its nature and cause are discussed. Chapters deal with classification and terminology, linguistic and pedagogic considerations, maternal and socioeconomic factors in etiology, and clinical manifestations. Also covered are perceptual problems, cerebral dominance, minor neurological signs, genetic properties, and the size of the problem. Psychiatric repercussions are reviewed, and the nature of developmental dyslexia described as the dyslexic child grows up. A lengthy bibliography is included. (KW)

ABSTRACT 30430

EC 03 0430 ED 043 994
Publ. Date Jul 70 72p.
Litchfield, Ticknor B.
A Program of Visual-Motor-Perceptual Training to Determine Its Effects upon Primary Level Children with Reading and Learning Deficiencies. Final Report.
Ramapo Central School District No. 1, Suffern, New York
New York State Education Department, Albany, Division of Research
EDRS mf,hc

Descriptors: exceptional child research; perceptually handicapped; visually handicapped; motor development; academic achievement; reading; perceptual motor development; psychomotor skills; eye hand coordination; perceptual development

The purpose of the project was to determine to what extent visual, motor, and perceptual training would improve the reading and general achievement of children with visual, motor, and perceptual deficiencies. Eighty first, second, and third graders, identified as having such handicaps by gross and fine screening instruments, were randomly divided into experimental and control groups. For 1/2 hour per day for six months, training exercises and activities were conducted in the following categories: ocular motor, movement skills, laterality and directionality, spatial judgments, eye-hand coordination, and visualization. Post-tests administered were the Fine Screening Instrument, Lorge-Thorndike IQ Test, Gates-McGinitie Reading Test, and Stanford Achievement Test. The IQ and Achievement Tests showed no gains of the experimental group over the control group. But the fine screening results showed more improvement in visual-motor-perceptual functioning by the experimental group, and anecdotal records by classroom teachers reported progress by nearly all the experimental students. (KW)

ABSTRACT 30453

EC 03 0453 ED N.A.
Publ. Date 70 176p.
Delacato, Carl H.
A New Start for the Child with Reading Problems: A Manual for Parents.
EDRS not available
David McKay Company, Inc., 750 Third Avenue, New York, New York 10017 ($5.95).

Descriptors: exceptional child research; learning disabilities; reading difficulty; reading; neurological defects; neurology; reading diagnosis; remedial programs; Doman Delacato Method

The first half of the book recounts the author's interest in children with reading problems, his work with brain-injured children and the lessons learned from studying the brain, and how he learned to apply the knowledge gained to children with reading disabilities. His investigations concerning the development of the nervous system and its key influence on the ability to read are detailed. The second part of the book provides for parents a complete program for treating a child's reading problem at home. Included is a list for checking the child's history, directions for evaluating his development, and complete descriptions of each step in the treatment program. (KW)

ABSTRACT 30464

EC 03 0464 ED N.A.
Publ. Date 43 349p.
Fernald, Grace M.
Remedial Techniques in Basic School Subjects.
EDRS not available
McGraw-Hill Book Company, 330 West 42nd Street, New York, New York 10036 ($7.95).

Descriptors: exceptional child research; learning disabilities; reading difficulty; remedial instruction; remedial reading; clinical diagnosis; teaching methods; etiology; spelling; mathematics; failure factors; case studies (education)

Resulting from numerous psychological experiments to develop academic skills conducted at the Clinic School (University of California at Los Angeles), the text describes the aim of clinical psychology, the clinic school, and problems of emotional adjustment. Methods of teaching reading (including letter-by-letter, word, word group, and phonetic techniques), types of disabilities, and the application of remedial techniques to group work and in the elementary school setting are discussed. Reports on the results of work in the clinical school, remedial reading rooms in Los Angeles City Schools, and physiological and psychological causes of reading disabilities are provided. The areas of spelling and mathematics are examined in terms of failure reasons, psychological factors, and remedial methods. The application of remedial techniques to the mentally handicapped is explored, and case studies involving various disabilities are presented. Information on individual differences in imagery and specific investigations of reading disabilities are appended, and a related bibliography is included. (RD)

ABSTRACT 30520

EC 03 0520 ED N.A.
Publ. Date 70 162p.
Deutsch, Cynthia P.; Schumer, Florence
Brain-Damaged Children: A Modality-Oriented Exploration of Performance.
EDRS not available
Brunner/Mazel, Inc., 80 East 11th Street, New York, New York 10003 ($7.95).

Descriptors: exceptional child research; neurologically handicapped; minimally brain injured; visual perception; auditory perception; tactual perception; haptic

perception; perception tests; lateral dominance; sensory integration; concept formation; perceptual motor learning; perception

Performance of 39 brain-damaged children (C.A. 6-1 to 12-6) and 39 neurologically unimpaired children matched for age, sex, and socioeconomic variables was studied. Tests to measure visual, auditory, and tactile or haptic perception with various degrees of interference were administered. Also measured were auditory discrimination, right-left discrimination, lateral dominance, modality preference, concept formation skills, and intersensory-multimodal performance. In general, findings showed that the tests could be used with the brain-injured subjects and there were good reliabilities for perceptual and perceptual-motor tasks. Test intercorrelation was not high, showing that the brain-injured child does not have a general perceptual impairment. Brain-injured subjects showed more consistency and stability within a sensory modality than did control subjects. Brain-injured subjects performed as well as normal subjects on simple, unimodal tasks, but less well on complex tasks and intersensory, multimodal tasks in visual and auditory areas. Tasks of a tactual nature and perceptual motor procedures were difficult for brain-injured subjects. On conceptual procedures, brain-injured subjects' performance appeared related to input and stimulus factors rather than conceptual inability. Implications for diagnosis and education are noted. (MS)

ABSTRACT 30836

EC 03 0836 ED N.A.
Publ. Date 70 144p.
Clark, Margaret M.
Reading Difficulties in Schools.
EDRS not available
Penguin Books, Inc., 7110 Ambassador Road, Baltimore, Maryland 21207 ($1.45).

Descriptors: exceptional child research; dyslexia; reading difficulties; reading readiness; teacher role; remedial programs; school community relationship; learning disabilities

To determine the extent to which certain variables in dyslexia were related to early reading progress in children, a community study was conducted involving 1545 children (age 7). Children considered to be backward readers were retested at eight years of age. The third part of the study concerned the small number of children of average intelligence who continued to have difficulty with reading. It was found that about 15% of the children showed independent reading skill after two years of school. Adequate motor coordination was shown by only 31.8% of the children at age seven. In general, it was noted that the difficulties of the problem readers were not specific to the problem of deciphering words on a printed page; there was a diversity of disabilities and not a common pattern to the group. Implications for the role of the teacher and of the remedial service were assessed. (CD)

ABSTRACT 30863

EC 03 0863 ED N.A.
Publ. Date Nov 70 5p.
Ferinden, William E.; Jacobson, Sherman
Early Identification of Learning Disabilities.
EDRS not available
Journal of Learning Disabilities; V3 N11 P589-93 Nov 1970

Descriptors: exceptional child research; learning disabilities; predictive ability (testing); identification; kindergarten children; early childhood; predictive validity; teacher role

Sixty-seven kindergarten children were screened for potential learning disabilities. Test profiles indicated that teachers' observations were useful (80%) in the selection of potential learning problems. The Wide Range Achievement Test and the Evanston Early Identification Scale were found to be reliable instruments for predicting which kindergarten children would not experience success in reading in the first grade. The Bender Gestalt Visual Motor Test was not a reliable instrument for prediction at this level. The Metropolitan Reading Test was an effective predictor only if the total test scores fell below the 30th percentile. (Author)

ABSTRACT 30982

EC 03 0982 ED N.A.
Publ. Date 70 233p.
Swartz, George S., Ed.; Tracy, Nathan L., Ed.
Language-Learning System and Learning Disability.
EDRS not available
Selected Academic Readings, Simon and Schuster, Inc., 630 Fifth Avenue, New York, New York 10020.

Descriptors: exceptional child research; learning disabilities; language development; language research; learning difficulties; learning processes; language role; reading difficulty; dyslexia; autism; neurology; language handicaps; auditory perception; educational research

Selected readings deal with the symbiotic connection of language and learning. An introductory section discusses Language-Learning System, under which language process and language media are subsumed, and children with disabilities in Language-Learning System. The 17 articles deal with such subjects as brain chemistry, development of the brain and language evolution, developmental approach to language disorders, handedness and language function, autistic children (including a review of research), dyslexia in braille-readers, ophthalmologist's role in dyslexia, construction and assessment of an experimental test of auditory perception, auditory perception in kindergarten children, auditory memory and delayed language development, a neurological and behavioral study of children with learning disorders, auditory and visual functions in good and bad readers, auditory-visual integration and intelligence and reading ability, identification and remediation of language problems, and learning disabilities--ethics and practice. (KW)

ABSTRACT 31235

EC 03 1235 ED N.A.
Publ. Date 68 311p.
Rosenberg, Sheldon, Ed.; Koplin, James H., Ed.
Developments in Applied Psycholinguistics Research.
EDRS not available
Macmillan Company, 866 Third Avenue, New York, New York 10022 ($8.95).

Descriptors: exceptional child research; psycholinguistics; language handicaps; language research; second language learning; aurally handicapped; aphasia; mentally handicapped; schizophrenia; conference reports

The text contains seven articles based on presentations from a summer institute in applied psycholinguistics sponsored by the department of psychology of the George Peabody College for Teachers. The topics discussed in the papers include the objectives and current status of applied psycholinguistics, the development of syntactic control in children, research on second-language learning, and language learning in relation to the deaf. Also described are studies on the grammar of aphasics, a disattention interpretation of schizophrenic language, and environmental factors in the language development of mentally handicapped children. A general overview of the collection is provided by Sheldon Rosenberg. (RD)

ABSTRACT 31333

EC 03 1333 ED N.A.
Publ. Date Jan 71 10p.
Eakin, Suzanne; Douglas, Virginia I.
Automatization and Oral Reading Problems in Children.
EDRS not available
Journal of Learning Disabilities; V4 N1 P31-8 Jan 1971

Descriptors: exceptional child research; reading difficulty; oral reading; learning disabilities; elementary school students; automatization

To determine whether children with poor oral reading skills would do less well than children with average or good oral reading skills on tasks requiring rapid serial response to simple common stimuli (tasks defining automatization), 32 boys from two elementary schools were tested. It was felt that the study provided support for the notion that automatization might be an important dimension along which children with impaired oral reading differ from normal children. Results indicated that the performance of poor readers was significantly inferior to that of good readers on all automatization tasks. (CD)

ABSTRACT 31492

EC 03 1492 ED N.A.
Publ. Date Jan 71 8p.
Barcai, Avner
Predicting the Response of Children with Learning Disabilities and Behavior Problems to Dextroamphetamine Sulfate.
EDRS not available
Pediatrics; V47 N1 P73-80 Jan 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; behavior problems; drug therapy; medical research; behavior change; medical treatment; predictive validity; amphetamines; dextroamphetamine sulfate

The clinical study used a phenomenological, office practice approach to diagnose the hyperkinetic child who responds with improved concentration and organization of his mental facilities to the amphetamines. The combination of anamnestic items, information from the teacher, and the clinical interview were found to be effective in correctly predicting approximately 85% of behaviorally disturbed children who would respond favorably to the stimulating drugs. The finger twitch test and a list of selected questions, which could be used by the pediatrician in his office, were found to lead to a weighted, non-inferential assessment of the child's mental status, as a help in determining the advisability of prescribing the stimulant for some behaviorally disturbed children. (Author)

ABSTRACT 31842

EC 03 1842 ED N.A.
Publ. Date Apr 71 1p.
Greer, Bobby G.; Whitley, Carolyn
The Relationship Between Birth Order and Learning Disabilities.
EDRS not available
Exceptional Children; V37 N8 P608 Apr 1971

Descriptors: exceptional child research; learning disabilities; birth order; family structure

To investigate the relationship between birth order and learning disabilities, records of 200 children diagnosed as learning disabled were examined and age, sex, number of children in family, and birth order recorded for each. Families ranged in size from one to nine children, with 3.21 the average number. Birth order information presented in tabular form shows that a significant proportion of the children came from large families. One hundred thirty-one subjects were from families with three or more children, and 74 of these 131 children ranked third or higher in birth order, comprising the largest category of subjects (i.e., 3-plus birth order with three or more children in family). (KW)

ABSTRACT 31964

EC 03 1964 ED N.A.
Publ. Date Apr 71 4p.
Raskin, Larry M.
Long-Term Perceptual Memory in Children with Learning Disabilities.
EDRS not available
Journal of Learning Disabilities; V4 N4 P182-5 Apr 1971

Descriptors: exceptional child research; learning disabilities; perception; memory

Long-term perceptual memory effects in the perception of apparent movement by children with learning disabilities were investigated. In a situation in which prior training was given to facilitate the perception of the illusion after intervals of either 3 minutes or 24 hours, the learning disabled showed perception memory effects the same as those found in normal children (Raskin, 1968). However, when the training was given with the expectation of its hindering the occurrence of perceived movement, it did so only after a 3-minute delay and not in those children who waited 24 hours. The latter result has also been reported for educable mentally retarded children (Raskin, 1969b) and indicates that these children may share a specific perceptual memory problem parallel to their general lack of inhibitory control. (Author)

ABSTRACT 32071

EC 03 2071 ED N.A.
Publ. Date Apr 71 242p.
Wender, Paul H.
Minimal Brain Dysfunction in Children.
EDRS not available
John Wiley and Sons, Inc., 605 Third Avenue, New York, New York 10016 ($10.50).

Descriptors: exceptional child research; learning disabilities; minimally brain injured; neurological defects; clinical diagnosis; etiology; psychological characteristics; medical treatment; theories; hyperactivity; drug therapy

Both theoretical and clinical aspects of the disorder known as mimimal brain dysfunction (MBD) or hyperactive behavior disorder are discussed. With detailed coverage of both aspects, the volume is intended to be of particular interest to pediatricians and child psychiatrists, and perhaps also to clinical psychologists and special educators. For the practitioner, extensive descriptive data on the following major topics are presented: characteristics and clinical signs of MBD, etiology, prevalence, diagnosis, prognosis, and management (including drug management, methods of psychological management for child and family, and educational intervention). For the theoretician, the final part of the book is devoted to a discussion of the theoretical basis of the MBD syndrome. Psychological and physiological theories of causation are considered, and, in conjunction with the latter, a neurological and biochemical model of the MBD syndrome to explain the etiology of some forms of MBD is presented in detail. Twelve case histories are appended. (KW)

ABSTRACT 32235

EC 03 2235 ED 050 518
Publ. Date 70 21p.
Satz, Paul and Others
An Evaluation of a Theory of Specific Developmental Dyslexia.
Florida University, Gainesville
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; dyslexia; maturation; etiology; theories; reading difficulty

Hypotheses accounting for the pattern of deficits in specific developmental dyslexia were examined. The theory postulates that the disorder reflects a lag in maturation of the central nervous system, particularly the left cerebral hemisphere. The hypotheses in question predicted that skills developing ontogenetically earlier (visual-motor and auditory-visual integration) will be more delayed in younger dyslexic children (ages 7-8 years), and that skills developing later (language and formal operations) will be more delayed in older dyslexic children (ages 11-12 years). Subjects were 20 disabled male readers and 20 control males, all of average or above average intelligence. Each group was subdivided by age: younger (ages 7-8) and older (ages 11-12). Three tests classified as nonlanguage or perceptual and three classified as language tests were administered. The nonlanguage tests were postulated to represent skills developing ontogenetically earlier. The nonlanguage tests partially discriminated between younger dyslexics and controls, while none of the nonlanguage tasks discriminated between the older groups. By contrast, the language tasks revealed significant differences between older dyslexics and controls, while only one language measure discriminated between the younger groups, thus substantially supporting the hypotheses under evaluation. (KW)

ABSTRACT 32274

EC 03 2274 ED N.A.
Publ. Date May 71 5p.
Alley, Gordon R. and Others
Minimal Cerebral Dysfunction as It Relates to Social Class.
EDRS not available
Journal of Learning Disabilities; V4 N5 P246-50 May 1971

Descriptors: exceptional child research; minimally brain injured; socioeconomic influences; socioeconomic status; learning disabilities

The relationship of minimal cerebral dysfunction to socioeconomic status was investigated in a midwestern child development clinic population. Two previous reports were contrasted, one stating that minimal cerebral dysfunction (MCD) occurred predominantly in the lower socioeconomic strata, the other suggesting that this was more prevalent in the upper classes. It was concluded that: MCD is distributed proportionately with a diagnosis of normal among five social classes; MCD, regardless of the presence or absence of an associated behavior disorder, does not change in its proportional incidence in all social class levels when compared to a normal group; within the MCD group, the presence or absence of an associated behavior disorder does not change the proportion of incidence in the five social class levels. The importance of the sampling population and the background and attitude of the clinician as a possible variable in formulating a diagnosis are discussed. (Author)

ABSTRACT 32466

EC 03 2466 ED N.A.
Publ. Date 71 4p.
Thompson, Harriet L.
Malnutrition as a Possible Contributing Factor to Learning Disabilities.
EDRS not available
Journal of Learning Disabilities; V4 N6 P312-5 Jun-Jul 1971

Descriptors: exceptional child research; learning disabilities; nutrition; research reviews (publications); etiology

Citing research studies on nutrition and the effects of particular protein and vitamin deficiencies on brain development and function, the article stresses the importance of adequate nutritional balance during the prenatal months and the first few years of life. Listed are signs, which may be indicative of malnutrition and which can be recognized by teachers or parents. It is argued that if parents can be educated in proper prenatal and postnatal nutrition of their infants, and if requisite nutrients can be made available, the number of children who develop learning problems necessitating special education may be decreased. (KW)

ABSTRACT 32481

EC 03 2481 ED N.A.
Publ. Date 70 215p.
Francis-Williams, Jessie
Children with Specific Learning Difficulties.
EDRS not available
Pergamon Press, Inc., Maxwell House, Fairview Park, Elmsford, New York 10523.

Descriptors: exceptional child research; learning disabilities; identification; preschool children; preschool evaluation; educational diagnosis

The possibilities of early identification of children of normal intelligence with specific learning disorders believed to arise from neurodevelopmental dysfunction are discussed. Following a summary of normal mental development and early childhood learning, research into means of identification of learning difficulties is reported. Examined are various tests and rating scales which were determined to be useful discriminators. Reported are the differences in performance on the test battery selected of 44 preschool children noted at birth as having minor neurological dysfunction and 63 controls who were normal in development. Symptoms indicative of dysfunction in a child 3-5 years old are enumerated. Also discussed are methods of helping preschool children and identification of learning disabilities in school children. Teaching experiments with children having specific learning disabilities are surveyed. Appended is an historical survey of research on various aspects of learning disabilities. (KW)

ABSTRACT 32706

EC 03 2706 ED N.A
Publ. Date Sum 71 3p.
Forer, Ruth K.; Keogh, Barbara K.
Out of the Classroom: Time Understanding of Learning Disabled Boys.
EDRS not available
Exceptional Children; V37 N10 P741-3 Sum 1971

Descriptors: exceptional child research; learning disabilities; time; cognitive ability; perceptual development

To investigate time understanding of children with learning disabilities, 46 middle socioeconomic status Caucasian boys (mean CA 131.63, mean IQ 91.45) enrolled in special classes who had severe and persistent learning problems were individually administered an author-developed Time Understanding Inventory (TUI). The cognitive section of the TUI tested knowledge of time in four subareas: subjective, objective, historic time, and time judgment. The perceptual section required demonstration of mechanics of time on four subtests: draw-a-clock, clock matching, clock fill-in, and time recognition. Findings showed that subjects had less mastery of cognitive and perceptual aspects of time understanding than do normal achieving children of comparable CA and IQ. Subjects functioned on both the cognitive and perceptual sections at a level three grades below their CA grade placement equivalent, suggesting that their lack of mastery of time concepts represented a generalized rather than specific disability. (KW)

ABSTRACT 32722

EC 03 2722 ED 052 563
Publ. Date 71 366p
Tarnopol, Lester, Ed.
Learning Disorders in Children: Diagnosis, Medication, Education.
EDRS not available
Little, Brown and Company, 34 Beacon Street, Boston, Massachusetts 02106.

Descriptors: exceptional child research; learning disabilities; medical treatment; medical evaluation; neurological defects; drug therapy; psychological evaluation

Nine papers dealing with educational, psychological, and medical aspects of the management of children with learning disabilities focus upon the medically-related aspects and information which would be useful to a multidisciplinary team in coordinating differential diagnostic efforts and instituting remediation programs. Discussions of the relationship between learning problems and neurological dysfunction, diagnosis and medical management using medication, and the relationship of medical management to educational procedures are aimed primarily at physicians. Following an introductory paper on neurogenic learning disorders, two case histories (including evaluations based on diagnostic tests and recommendations for remediation) are presented. Other papers treat medical responsibilities, the use of drugs in diagnosis and treatment, the neurology of learning disabilities, psychological diagnosis and remediation in relation to brain damage and learning disabilities, and the clinical pharmacology of psychotropic drugs with special reference to children. Also included are the proceedings of a panel of physicians and psychologists discussing management via medication. (KW)

ABSTRACT 40044

EC 04 0044 ED N.A.
Publ. Date Oct 71 9p.
Keogh, Barbara K.
Hyperactivity and Learning Disorders: Review and Speculation.
EDRS not available
Exceptional Children; V38 N2 P101-9 Oct 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; underachievers; behavior problems; research reviews (publications); theories

Research on hyperactive children is reviewed in order to define and clarify relationships and interactions between hyperactivity and learning disorders. Despite agreement on maladaptive social and behavioral characteristics associated with hyperactivity, findings specifying the nature of educational deficits are inconsistent and inconclusive. Three hypotheses are proposed to explain learning problems of hyperactive children. The first represents the medical-neurological syndrome explanation; the second suggests that activity disrupts attention and the information acquisition stages of learning; the third implicates impulsivity in decision making. Although neither exhaustive nor mutually exclusive, the hypotheses differ in remedial and treatment implications. Evidence is reviewed under each hypothesis. (Author)

ABSTRACT 40071

EC 04 0071 ED N.A.
Publ. Date Oct 71 10p.
Ackerman, Peggy T. and Others
Children with Specific Learning Disabilities: Bender Gestalt Test Findings and Other Signs.
EDRS not available
Journal of Learning Disabilities; V4 N8 P437-46 Oct 1971

Descriptors: exceptional child research; learning disabilities; test interpretation; psychological tests; Bender Gestalt Test

The Bender Visual-Motor Gestalt Test protocols of 82 elementary school boys with learning disabilities were scored for developmental errors using the Koppitz system. Sixty-seven percent of the children with learning disabilities (CLD), as compared with only 44% of a group of 34 controls, made more errors than the mean for children of equivalent ages in Koppitz's normative sample. Whereas controls with below average Bender scores were no different from controls with adequate Bender scores on any WISC subtest, CLD with subaverage Benders scored significantly lower on Information, Arithmetic, Picture Completion, Block Design, and Mazes then CLD with adequate protocols. Lower WISC IQs were coupled with poor Bender reproductions in 45% of CLD but in only 21% of the controls. The CLD with classical neurological signs did not have a reliably higher incidence of poor Bender scores than the CLD without classical signs. (Author)

ABSTRACT 40232

EC 04 0232 ED N.A.
Publ. Date Nov 71 7p.
Minde, K. and Others
The Hyperactive Child in Elementary School: A 5 Year, Controlled, Follow-up.
EDRS not available
Exceptional Children; V38 N3 P215-21 Nov 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; followup studies; academic achievement; behavior problems; elementary school students

The study examined the academic performance of 37 school-children diagnosed as hyperactive 4 to 6 years previously, and compared it with the performance of an equal number of nonhyperactive classmates. The results indicated that hyperactive youngsters have a significantly higher failure rate in all academic subjects and are rated by their teachers as displaying far more behavioral problems than their controls. While the hyperactive children showed an increase in learning disorders and did poorer on a group IQ test than their peers, intelligence alone was ruled out as the main contributor to their academic failure. (Author)

ABSTRACT 40325

EC 04 0325 ED N.A.
Publ. Date Nov 71 7p.
Comly, Hunter H.
Cerebral Stimulants for Children with Learning Disorders?
EDRS not available
Journal of Learning Disabilities; V4 N9 P484-90 Nov 1971

Descriptors: exceptional child research; learning disabilities; minimally brain injured; hyperactivity; drug therapy; behavior patterns

Reported were two studies of effects of cerebral stimulants on minimally brain damaged children. Forty children were rated twice weekly by their classroom teacher on the Fels Rating Scale for six weeks. A double blind placebo method proved that dextro-amphetamine significantly (p less than .001) improved their classroom behavior. Using a questionnaire, parents of 197 children taking cerebral stimulants reported details of symptom and trait changes brought about by cerebral stimulants. The work plus subsequent clinical experience suggested that with certain precautions, it was safe to employ chemical aids for a year or more, if necessary. No habituation to cerebral stimulants has been encountered in any school-aged child by the author in 25 years of clinical experience These drugs might ameliorate listening ability, overexcitability, forgetfulness, and peer relationships as much as overactivity. (Author)

ABSTRACT 40371

EC 04 0371 ED 056 425
Publ. Date Feb 71 177p.
Broadbent, Frank W.; Meehan, D. Roger

An Evaluation of Simulation as an Approach to Assisting Elementary Teachers to Identify Children with Learning Disabilities and Utilize Ancillary Personnel in Initiating Remediation Programs within Their Classrooms. Final Report.
Syracuse University, New York
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.
EDRS mf,hc
OEG-0-70-4388(607)
BR-42-2294

Descriptors: exceptional child research; learning disabilities; teacher education; identification; remedial instruction; models; elementary education; program descriptions; program evaluation; workshops; nonprofessional personnel

Investigated was use of an instructional simulation model with elementary classroom teachers to identify learning disabled children, to utilize effectively ancillary personnel, and to initiate remediation programs in the classrooms. Teachers participating in the model were said to view children on videotape in many school settings, review academic achievement by studying records, select course of action on preprogramed materials, receive immediate feedback as reinforcement, study commercial instructional materials, and plan remedial programs for two learning disabled children. Two evaluation instruments developed were an opinionnaire and a set of three microsimulated situations. The simulation model was tested by 17 persons in a small elementary school. Results of the opinionnaire indicated that the model was successful and could serve as inservice training. Analysis of microsimulator showed significant difference between means of control and experimental groups, and two of three subtests showed significant differences in favor of the experimental groups. It was concluded that the simulation workshop did improve teacher observational skills needed to recognize learning disabilities and to formulate remedial programs. (CB)

ABSTRACT 40374

EC 04 0374 ED 056 428
Publ. Date May 71 136p.
Padalino, Jane P.
A Program for the Identification and Remediation of Perceptual Deficiencies in Kindergarten and Primary Grade Students. Final Interim Progress Report.
Union Township Board of Education, New Jersey
Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D. C.
EDRS mf,hc
OEG-3-7-703564-4312

Descriptors: exceptional child research; perceptually handicapped; identification; remedial instruction; learning disabilities; program descriptions; program evaluation; perceptual motor coordination; motor development; academic achievement; intervention; statistical data

A 3-year program for early identification and remediation of perceptual deficiencies to prevent or minimize learning disabilities was conducted with two successive kindergarten classes. The 1967 class received intensive training for 3 years, while the 1968 class received intensive training for 2 years. Comparison of pre and posttest data for students receiving intensive training indicated improvement in areas of visual-motor integration and certain aspects of gross motor development, particularly in awareness of body parts. Occasional indications were also found of significant improvement in associative processes and in sequencing. Test results also suggested carry over from training success to academic achievement. Children receiving the enrichment program in the class of 1967 were said to score significantly higher than the control group on vocabulary tests. In general, written statements by teachers, specialists, and administrators demonstrated project effectiveness. Children in the training program were found to be more attentive and better organized. Comparison of growth scores for children in the training program who originally showed deficiencies in perceptual motor match and/or in associative processes improved most in the areas. Auditory dynamics seemed the most difficult to remediate. (CB)

ABSTRACT 40530

EC 04 0530 ED N.A.
Publ. Date Dec 71 6p.
Hunter, Edna J.; Johnson, Laverne C.
Developmental and Psychological Differences between Readers and Non-readers.
EDRS not available
Journal of Learning Disabilities; V4 N10 P572-7 Dec 1971

Descriptors: exceptional child research; learning disabilities; reading difficulty; psychological characteristics; family characteristics; reading ability; maturation; individual characteristics

The study compared 20 boys with reading disability aged 7-11 to 11-4 with 20 matched controls to examine how non-readers differ from children who read at age-grade level or better. Significant differences were found between the groups with respect to historical, familial, developmental, and psychological factors. Controls had significantly higher WISC Verbal IQ's; higher WISC Information, Vocabulary, Digit Span, Arithmetic, Similarities and Coding subtest scores; and lower mean Bender-Gestalt scores. The groups differed significantly on familial incidence of dyslexia, tested laterality, self-confidence, attentional factors, hyperactivity, birth order, age at crawling, and age at school entry. Significant correlations were found between tested attention and reading proficiency and between percent righthand dominance and reading proficiency. (Author)

ABSTRACT 40642

EC 04 0642 ED N.A.
Publ. Date 71 404p.
Myklebust, Helmer R., Ed.
Progress in Learning Disabilities, Volume II.
EDRS not available
Grune and Stratton, Inc., 111 Fifth Avenue, New York, New York 10003 ($13.75).

Descriptors: exceptional child research; learning disabilities; textbooks; remedial instruction; electroencephalography; attention span; early childhood education; cognitive development; thought process-

es; auditory training; visual learning; mathematics

The second volume of 12 readings on learning disabilities is said to emphasize remediation: points of view, rationales, principles, techniques, and application of diagnostic findings. Orville C. Green and Suzanne M. Perlman discuss endocrinology and disorders of learning from the viewpoint that proper nutritional supplies are essential to intellectual development. John R. Hughes then describes two studies pertaining to electroencephalography and learning disabilities. Arguments and evidence are next presented by Roscoe A. Dykman and others that a specific learning disability exists with the cardinal symptom of defective attention. Davis Howes then discusses vocabulary size estimated from the distribution of word frequencies. Examined next are early identification and careful management of learning disabilities in early childhood so that the child can best adapt himself to his environment, by Eric Denhoff and others. Christopher Connolly analyzes social and emotional factors in learning disabilities from the viewpoint that a child needs to be viewed first as a child with normal needs and second as an individual with a handicap. Attention next is focused on impact of cognitive perceptual motor deficits on personality development and relationships to behavior and learning by Eli Z. Rubin. Raymond Kluever investigates the relationship of mental abilities to learning disabilities. Learning disabilities and cognitive processes are then discussed by Helmer R. Myklebust and others. James C. Chalfant and Virgil E. Flathouse emphasize investigation of children's learning through auditory and visual input channels. Elena Boder reviews three prevailing diagnostic concepts of developmental dyslexia and advocates a new diagnostic approach in which reading and spelling are analyzed joinlly. Last, Robert Cohn examines arithmetic and learning disabilities. (CB)

ABSTRACT 40680

EC 04 0680 ED 057 513
Publ. Date 71 46p.
Graves, James W. and Others
Structured Activities in Perceptual Training to Aid Retention of Visual and Auditory Images.
Chicago Board of Education, Illinois
Council for Exceptional Children, Arlington, Virginia
EDRS mf,hc
Paper Presented at the Special Conference on Emerging Models of Special Education for Sparsely Populated Areas (Memphis, Tennessee, December 3, 1971).

Descriptors: exceptional child research; perceptually handicapped; perceptual development; retention; vocabulary development; learning disabilities; cognitive development; visual learning; auditory training; verbal learning

The experimental program in structured activities in perceptual training was said to have two main objectives: to train children in retention of visual and auditory images and to increase the children's motivation to learn. Eight boys and girls participated in the program for two hours daily for a 10-week period. The age range was 7.0 to 12.10 years, and the IQ range was 63 to 113. All members of the group were functionally unable to read from the Oral Reading Survey Test taken from the Reader's Digest. The program exposed the children to multiple experiences that allowed them to retain both visual and auditory abstract word forms. Instructional materials and approaches used were various games, filmstrips, story telling, athletics, work sheets, records, perceptual learning aids, pictures for discussion, tactile and kinesthetic aids, and experience charts. The children were taught as a group, except for two weekly 30-minute sessions with each individual. A significant part of the experiment was thought to be the formulation of a global clue pattern that aided both recognition and recall. The first 52 words taught were those words to which the children had been exposed. An additional 48 words were words of comparison, and the last 50 words were the most common nouns used. A pretest posttest design indicated that the program was successful. (CB)

ABSTRACT 40685

EC 04 0685 ED N.A.
Publ. Date 71 218p.
Koppitz, Elizabeth Munsterberg
Children with Learning Disabilities: A Five Year Follow-Up Study.
EDRS not available
Grune and Stratton, Inc., 757 Third Avenue, New York, New York 10017 ($9.75).

Descriptors: exceptional child research; learning disabilities; individual characteristics; followup studies; statistical data; special classes; academic achievement; failure factors; success factors; emotional adjustment; social characteristics; cognitive ability

The 5-year followup study of the first 177 students, ages 6 to 12 years, who were enrolled in a public school program of special classes for the learning disabled (LD) sought to define factors contributing to the learning problems affecting the students' progress or lack of it in the special classes. LD students included those whose disability might result from developmental lags, neurological impairment, severe early deprivation, emotional disturbance, brain injury, or other reasons. Data were gathered via school records, test protocols, and teachers' reports collected and used in conducting the special classes. Each child was studied for 5 years following his admission to the program. Analysis of data enabled determination of the characteristics of pupils at entry into LD program (ability to control self, integrative functioning, reasoning ability, emotional adjustment, social adjustment, family and other background factors), pupils' educational status 5 years later, progress and adjustments of the 42 LD pupils who returned to regular classes, progress of long-term LD pupils, and characteristics of pupils who were referred for hospitalization, withdrawn from the program, or who left and then returned to the LD program. Recommendations concerning LD programs and a comprehensive special education program are made. (KW)

ABSTRACT 40729

EC 04 0729 ED N.A.
Publ. Date 71 8p.
Abidin, Richard R., Jr. and Others
Elementary School Retention: An Unjustifiable, Discriminatory and Noxious Educational Policy.
EDRS not available
Journal of School Psychology; V9 N4 P410-7 Win 1971

Descriptors: exceptional child research; learning disabilities; learning difficulties; elementary school students; academic achievement; intelligence quotient; demography; grade repetition

The long and short term correlates of first and second grade retention were examined in relation to the variables of achievement and intelligence over a 6 year period. The retained and promoted control group were also compared in terms of relevant demographic variables: sex, race, initial intelligence, socio-economic level of family, father absent, etc. The data led the authors to conclude that retention was an unjustifiable, discriminatory, and noxious educational policy. (Author)

ABSTRACT 40733

EC 04 0733 ED N.A.
Publ. Date 71 11p.
Dil, Nasim; Gotts, Edward Earl
Improvement of Arithmetic Self Concept Through Combined Positive Reinforcement, Peer Interaction, and Sequential Curriculum.
EDRS not available
Journal of School Psychology; V9 N4 P462-72 Win 1971

Descriptors: exceptional child research; learning disabilities; underachievers; mathematics; self concept; behavior change; positive reinforcement; peer relationship; elementary school students

The study investigated the development of arithmetic self concept and achievement among 7 to 9 year-old children who had problems or who were at the bottom of the lowest track of a third grade. Ss were two girls and two boys from a class of 24 low track children, who completed a one-dimensional five-point scale for self concept and were administered 20-item tests for achievement in arithmetic repeatedly throughout 8 weeks of instruction. Formation of small groups, peer interaction, individual curriculum adjustment, and positive reinforcement both at individual and group level were applied. Effective, correlated results were recorded along both scales for each child, and the gains for the four target children were shown in comparison to the class as a whole. (Author)

ABSTRACT 40769

EC 04 0769 ED 057 535
Publ. Date (71) 13p.
Endler, Norman S.; Minden, Harold A.

Anxiety, Conformity, and Self-Perception as Related to Learning Disabilities.
York University, Canada
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; underachievers; summer programs; remedial programs; elementary school students; junior high school students; camping

Normal achievers were compared with underachievers on measures of anxiety, curiosity, motivation, conformity, self concept, and achievement. The 40 male underachieving children (age range 8 to 13 years) with learning disabilities received a 6-week remedial training program relevant to their deficits, in addition to a regular summer camp program, while the 40 normal achieving males (age range 8 to 13 years) were involved in a regular camp program. The achievers obtained higher scores than the underachievers on reading, spelling, and arithmetic, and older children did better than younger children within each sample, but there was no overlap in achievement between the two samples. It was found that the degree of underachievement increased markedly as the children got older, suggesting that remediation for underachievement needs to occur as early as possible. The underachievers conformed significantly less than the normals which was thought to be indicative of a lack of responsiveness to social reinforcement on the part of children with learning disabilities. Similarly, in some situations the underachievers reported less anxiety than the normals, perhaps indicating a greater social awareness and ability to verbalize anxiety on the part of the normals. (Author)

ABSTRACT 40819

EC 04 0819 ED 057 539
Publ. Date Jun 71 52p.
Wepman, Joseph M.; Morency, Anne S.
School Achievement as Related to Speech and Perceptual Handicaps. Final Report.
Chicago University, Illinois
Office of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEG-2-7-070461-4543
BR-70461

Descriptors: exceptional child research; perceptually handicapped; intermediate grades; academic achievement; perceptual development; learning disabilities; longitudinal studies; speech handicaps

A longitudinal study of 120 children through grades one to six was undertaken. The present study focused on the intermediate grades (four through six). The goals were to explore the relationships among perceptual processing ability development, articulatory accuracy, intellgience, and academic achievement. The assessment battery consisted of an original five-part perceptual test battery; the Bender Visuo-Motor Gestalt test, the Dual Modality Test of Articulation, and the Metropolitan Achievement Test. The major findings of the study were that: the perceptual tests showed a yearly change characteristic of developmental processes; perceptual process ability and articulation errors became asymptotic by the end of the third grade; there was no discernible difference in articulation accuracy whether or not a child was exposed to speech therapy during the first three grades; there was a continuing effect upon school achievement of the level of perceptual processing ability at grade one; there was almost no discernible relationship between early articulation ability and school achievement at any grade level; and speech therapy did not enhance school achievement of those children who were exposed to it over those who were not. (Author)

ABSTRACT 40883

EC 04 0883 ED 057 545
Publ. Date 71 101p.
Hisama, Toshiaki; Hotchkiss, James
Motivation and Achievement of Children with Learning and Behavior Problems as a Function of Locus of Control. Monograph No. 3.
Oregon University, Eugene
Office of Education (DHEW), Washington, D. C., Bureau of Educational Personnel Development
EDRS mf,hc
OEG-0-9-470117-3664(721)

Descriptors: exceptional child research; learning disabilities; behavior problems; academic achievement; motivation; elementary school children

The study investigated achievement motivation of children with learning and behavior problems and examined effects of various types of verbal instruction on performance tasks and the resulting relationships of these verbal instructions to achievement motivation. The subjects were 48 third and fourth grade children diagnosed as having learning and/or behavior problems. Testing instruments were Bialer-Cromwell's Children's Locus-of-Control Scale (LCS), Coding Test and Digit-Symbol Test taken from Wechsler Intelligence Scale for Children, and NIM (Marienbad) game. Based on their LCS scores, the 48 Ss were divided into high and low achievement motivation groups. Each group was then divided into three experimental groups. For the Coding Test, the NIM, and the Digit-Symbol Test, each of the three groups received different verbal instructions and was told that their results were above average, average, or below average. Results indicated that level of achievement motivation in both experimental and contrast groups was the same as measured by the LCS, that experimental Ss in the high achievement motivation group performed better than Ss in the low achievement motivation group, and that within the low achievement motivation group, performance was reinforced by previously announced results. (CB)

ABSTRACT 40884

EC 04 0884 ED 057 546
Publ. Date 71 202p.
Dunlap, William and Others
Differential Effects of Activity-Oriented vs. Textbook-Oriented Mathematics Instruction for Elementary School Children with Learning and Behavior Problems. Monograph No. 4.
Oregon University, Eugene
Office of Education (DHEW), Washington, D. C., Bureau of Educational Personnel Development
EDRS mf,hc
OEG-0-9-470117-3664(721)

Descriptors: exceptional child research; learning disabilities; behavior problems; elementary school children; mathematics; textbooks; teacher developed materials; academic achievement; student attitudes

Compared were the effects of two experimental arithmetic treatments, called Laboratory and Textbook, upon achievement and attitude development of fourth grade children. Prior to the study, the experimenter employed task analysis procedures to develop hierarchies of skills for the four operations on whole numbers. During the instructional phase of 29 days, the 73 students in the Laboratory group performed teacher-designed instructional activities that involved extensive use of games and manipulation of physical objects by children. The 74 students in the Textbook group were assigned traditional work from an arithmetic textbook. Children with behavior problems and learning difficulties in arithmetic were identified. At the conclusion of the experimental phase, three measures of children's arithmetic achievement were obtained: computation skills, knowledge of concepts, and application of processes. Measures were also taken of children's attitudes toward arithmetic, school, reading, spelling, and science. As measured by a commercial achievement test, no significant differences between treatments were found for each of the three areas of arithmetic achievement investigated. On the experimenter-designed achievement tests, significant differences between treatments were found for Laboratory treatment of concepts and Textbook treatment of computation skills at the .05 and .01 levels, respectively. (Author/CB)

ABSTRACT 40914

EC 04 0914 ED N.A.
Publ. Date Feb 72 2p.
Wetter, Jack
Parent Attitudes Toward Learning Disability.
EDRS not available
Exceptional Children; V38 N6 P490-1 Feb 1972

Descriptors: exceptional child research; learning disabilities; parent attitudes; mother attitudes; fathers

The study compared attitudes of parents of learning disabled children with attitudes of parents whose children did not have a learning disorder. Subjects were 70 sets of parents of children who were pediatric clinic outpatients. Parents of both experimental and control groups were administered the Child Behavior Rating Scale (Cassel, 1962); all mothers completed the Mother-Child Relationship Evaluation (Roth, 1961). Results indicated that mothers of the learning disabled

children showed greater overindulgence and rejection toward the child but no more overprotection than the control mothers. Fathers did not perceive the learning disabled child as being better adjusted than did the mothers, as expected. Greater parental disagreement in assessing their child's overall adjustment was found among the experimental group parents than in the control group. (KW)

ABSTRACT 41324

EC 04 1324 ED 059 556
Publ. Date 71 35p.
Conners, C. Keith
Comparative Effects of Stimulant Drugs in Hyperkinetic Children.
Massachusetts General Hospital, Boston, Child Development Laboratory
Harvard University, Cambridge, Medical School
EDRS mf,hc
Paper Presented at the International Congress of Pediatrics (13th, Vienna, Austria, August 29-September 4, 1971).

Descriptors: exceptional child research; hyperactivity; minimally brain injured; drug therapy; medical treatment; medical research; behavior change; learning disabilities

The study compared the efficacy, side effects, and safety of magnesium pemoline (Cylert) and dextroamphetamine (Dexedrine) as compared with placebo. Subjects were 81 children, ages 6-12 years, who evidenced one or more signs of minimal brain dysfunction, and were referred with major complaints of hyperactivity, short attention span, distractibility, poor frustration tolerance, disruptive behavior, and academic problems. Subjects were randomly assigned to the three treatment conditions. During the 8 weeks, medical evaluation occurred four times, psychological testing twice, and parent and teacher ratings weekly. It was found that both drugs significantly reduced symptomatology over placebo controls. Dexedrine produced a more immediate and dramatic effect, with more patients being much improved. Cylert, however, did benefit a substantial number of patients, with fewer anorexic side effects. Neither drug produced hematologic, liver, kidney, or cardiovascular effects of consequence. (KW)

ABSTRACT 41486

EC 04 1486 ED N.A.
Publ. Date Apr 72 9p.
Halliwell, Joseph W.; Solan, Harold A.
The Effects of a Supplemental Perceptual Training Program on Reading Achievement.
EDRS not available
Exceptional Children; V38 N8 P613-21 Apr 1972

Descriptors: exceptional child research; reading difficulty; perceptual development; academic achievement; perceptual motor learning; learning disabilities; reading; primary grades

At the beginning of the first grade, 105 students designated as potential reading problems were divided into three groups of 35 children each: experimental I, which received supplementary perceptual training in addition to the regular reading program; experimental II, which received traditional supplementary reading instruction in addition to the regular reading program; and the control group, which received no supplementary instruction. The Metropolitan Achievement Test (MAT) was administered at the end of May. The statistical analysis of the data indicated that, of all the groups, only the experimental I total group and the experimental I boys read significantly better than the respective control groups on the reading subtest of the MAT. (Author)

ABSTRACT 41546

EC 04 1546 ED 060 596
Publ. Date (72) 32p.
Satz, Paul; Friel, Janette
Some Predictive Antecedents of Specific Learning Disability: A Preliminary One Year Follow-up.
Florida University, Gainesville, Neuropsychology Laboratory
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; predictive measurement; kindergarten children; identification; reading difficulty; diagnostic tests; longitudinal studies; males

Based on a conceptualization of specific learning disability within a developmental rather than disease model, the longitudinal research project attempted to assess early indices of later reading disability. Kindergarten boys (N equals 474) were tested at the beginning of the school year on a number of developmental and neuro-psychological tests (predictors). At the end of the year, preliminary followup consisted of classification of the students by their teachers into High Risk and Low Risk criterion groups for potential learning disability (the true criterion would be third grade reading achievement scores). Purpose of the classification by teachers was to obtain preliminary criterion estimates of subsequent learning disability in order to determine the predictive validity of the independent variables (the tests administered earlier). Results showed high concordance between predictor measures (tests) and teacher classifications: tests correctly classified 78.4% of the children classified as High Risk, and 82.7% of the Low Risk children, suggesting that correct identification can occur even before formal reading instruction. Hightest discriminating variables were Finger Localization test, socioeconomic status, Dichotic Listening total recall, and Peabody Picture Vocabulary Test. (KW)

ABSTRACT 41639

EC 04 1639 ED N.A.
Publ. Date Mar 71 8p.
Hartman, Robert K.
An Investigation of the Incremental Validity of Human Figure Drawings in the Diagnosis of Learning Disabilities.
EDRS not available
Journal of School Psychology; V10 N1 P9-16 Mar 1972

Descriptors: exceptional child research; learning disabilities; diagnostic tests; test validity; Draw-A-Man

The human figure drawing is often used to assess body image immaturity or disturbances in children with learning disabilities. This research investigated the incremental validity of the Draw-A-Man when it was used as part of a battery which included the Wechsler Intelligence Scale for Children (WISC) and the Bender-Gestalt. A multiple regression prediction formula was developed so that age, IQ, and Bender-Gestalt scores could be used to estimate the expected Draw-A-Man scores of 100 children diagnosed as having learning disabilities. The mean of Ss' actual scores was not significantly different from the mean of their predicted scores. The results led to the conclusion that the Draw-A-Man test, scored by the Goodenough-Harris method, lacks incremental validity when the WISC and Bender-Gestalt are part of the diagnostic battery. (Author)

ABSTRACT 41641

EC 04 1641 ED N.A.
Publ. Date Mar 72 8p.
Sabatino, David A. and Others
Perceptual, Language, and Academic Achievement of English, Spanish, and Navajo Speaking Children Referred for Special Classes.
EDRS not available
Journal of School Psychology; V10 N1 P39-46 Mar 1972

Descriptors: exceptional child research; learning disabilities; special classes; elementary school students; language development; academic achievement; bilingual students; language handicaps

The purpose of this study was to determine the perceptual language and academic achievement functions of English, Spanish, and Navajo children experiencing learning problems and referred for placement into special education classes. Those test variables which discriminated among the native English-speaking children and the children who spoke Spanish or Navajo natively were, as predicted, those tasks which involved knowledge of the linguistic rules of English. It would seem that, taken as a group, the school learning problems experienced by the native Spanish- or Navajo-speaking children were the result of their limited linguistic competence in English, the language of instruction in their classrooms. (Author)

ABSTRACT 41757

EC 04 1757 ED N.A.
Publ. Date May 72 7p.
Conners, C. Keith
Psychological Effects of Stimulant Drugs in Children with Minimal Brain Dysfunction.
EDRS not available
Pediatrics; V49 N5 P702-8 May 1972

Descriptors: exceptional child research; minimally brain injured; drug therapy; psychological characteristics

Two technical studies involving the drugs dextroamphetamine, methylphenidate, and magnesium pemoline were reported

in regard to the psychological characteristics and effects of stimulant drugs in children with minimal brain dysfunction. The two studies involved similar populations of approximately 80 elementary school children diagnosed as minimally brain injured. Studies of methylphenidate and dextroamphetamine revealed that students receiving the drugs scored better on the overall test battery than did those students not receiving the drugs. The second study with magnesium pemoline and dextroamphetamine yielded results showing that students' general behavior patterns improved as a result of taking the drugs. All children, however, did not respond identically to the drugs. (CB)

ABSTRACT 41859

EC 04 1859 ED N.A.
Publ. Date Dec 71 22p.
Crinella, Francis M. and Others
Unilateral Dominance Is Not Related to Neuropsychological Integrity.
EDRS not available
Child Development; V42 N6 P2033-54 Dec 1971

Descriptors: exceptional child research; lateral dominance; neurology; neurologically handicapped; minimal brain injury; theories; performance factors

Comparative and developmental neuropsychological literature relating to the question of cerebral dominance and limb and eye perference suggest that there is no biological rationale for assuming that the two phenomena are related or that agreement in eye, hand, and foot preference (LA) or strength of lateral preference (SLP) should confer an adaptive advantage on the human organism. A study of 53 children who were behaviorally impaired secondary to verified or suspected central nervous system (CNS) pathology and 37 who were above average in academic standing did not establish strong linear predictive relationships between LA and SLP and 70 neuropsychological test measures. LA and SLP appear to have limited significance for human behavior, and the necessity for complementarity between the asymmetrically organized cerebral hemispheres is suggested as a more basic developmental necessity. (Author)

ABSTRACT 41860

EC 04 1860 ED N.A.
Publ. Date Dec 71 6p.
Sabatino, David A.; Becker, John T.
Relationship Between Lateral Preference and Selected Behavioral Variables for Children Failing Academically.
EDRS not available
Child Development; V42 N6 P2055-60 Dec 1971

Descriptors: exceptional child research; learning disabilities; lateral dominance; failure factors; academic achievement; language ability; perceptual motor coordination

A battery of tests designed to measure 17 behaviors and three areas of academic achievement were administered to 472 elementary school Ss failing in school, evidencing 1 year or more of academic underachieving in reading. The Ss were divided into three groups on the basis of their lateral preferences: unilaterally right, unilaterally left, and confused laterality. The data indicated that lateral preference had little relationship to language, perceptual-motor development, and academic achievement for the three lateral preference groups.

ABSTRACT 41911

EC 04 1911 ED N.A.
Publ. Date 72 5p.
Chapman, L. J.; Wedell, K.
Perceptual-Motor Abilities and Reversal Errors in Children's Handwriting.
EDRS not available
Journal of Learning Disabilities; V5 N6 P321-5 Jun-Jul 1972

Descriptors: exceptional child research; learning disabilities; handwriting; perceptual motor coordination; space orientation

A group of 7 1/2-to-8 1/2-year-old children who made persistent reversal errors in handwriting were identified in the course of a previous survey. The performance of this group of children on a variety of perceptual-motor measures was compared with that of a matched control group of children who made no reversal errors. Emphasis was put on the assessment of the children's spatial orientation, particularly on their awareness of the spatial coordinates of their own bodies. The children in the reverser group were found to have a significantly poorer performance than those in the nonreverser group on only a few of the measures. The ways in which levels of perceptual-motor skill may affect handwriting achievement are discussed in the light of these findings. (Author)

ABSTRACT 41914

EC 04 1914 ED N.A.
Publ. Date 72 6p.
Ayres, A. Jean
Improving Academic Scores Through Sensory Integration.
EDRS not available
Journal of Learning Disabilities; V5 N6 P338-43 Jun-Jul 1972

Descriptors: exceptional child research; learning disabilities; sensory integration; perceptual motor learning; remedial programs; sensory training; academic achievement

A group of learning disabled children, matched with a control group for degree and type of sensory integrative dysfunction, showed greater gains than the control group on academic tests after an intervention program designed to enhance sensory integration. Children with auditory-language problems but without other evident perceptual-motor involvement made significant gains, as did those with more generalized problems. The remedial program, based on understanding how the brain integrates sensations, stressed controlled vestibular and somatosensory stimulation and normalizing brain-stem sensory and motor mechanisms. Language was employed for communication purposes only and not as part of the remedial program. (Author)

ABSTRACT 41936

EC 04 1936 ED 062 739
Publ. Date 72 112p.
Exceptional Children Conference Papers: Learning and Language Disabilities.
Council for Exceptional Children, Reston, Virginia
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.

EDRS mf,hc
Papers Presented at the Annual International CEC Convention (50th, Washington, D. C., March 19-24, 1972).

Descriptors: exceptional child research; learning disabilities; language handicapped; conference reports; identification; inservice teacher education; teaching methods; spelling; program descriptions

The ten conference papers on learning and language disabilities begin with discussions of staff development procedures for teachers of language handicapped children, methods of instructional intervention for such children, and the comparative utility of the limited, intensive, and comprehensive methods of identification and evaluation of language handicapped students. Research reported concerns the elimination of isolate behavior of a girl in a learning disability class, the contributions of perceptual and conceptual skill training to ability to discriminate and reproduce geometric form, use of distributive practices to modify spelling performance, and the electroencephalogram as a predictor of intellective and academic performance. Additional papers discuss behavioral aspects of learning disabilities and recent developments in the education of learning disabled adolescents. (KW)

ABSTRACT 42099

EC 04 2099 ED 063 692
Publ. Date Dec 72 828p.
Ensher, Gail L.
A Diagnostic Study of Reading Disabilities of Children Enrolled in Six Public School Special Classes for the Mentally Retarded. Final Report.
Boston University, Massachusetts, School of Education
National Center for Educational Research and Development (DHEW/OE), Washington, D. C.
EDRS mf,hc
OEG-1-9-090047-0112(010)
BR-9-A-047
Presented As the Author's Doctoral Dissertation.

Descriptors: exceptional child research; educable mentally handicapped; reading difficulty; emotional problems; cognitive processes; mentally handicapped; learning disabilities; clinical diagnosis; educational methods; remedial instruction; student teacher relationship; literature reviews; research methodology

The 2-year project of intensive clinical studies of children, teachers, and educational strategies was reported to be

primarily concerned with characteristics of emotional behavior and cognitive functioning in children termed educable mentally retarded, assessments of learning and emotional disorders in children, effects of remediation program, and teacher characteristics and their impact on learning in children. The project report was divided into four major sections: review of literature on current theories of mental retardation and cognitive functioning, and evidence on learning disabilities and performance and behavior variance of children classified as retarded; presentation of research methodology used; presentation of clinical data based on evaluations of children and teachers the first year and remediation attempts during the second year; presentation of selected portions of group data; and summary and conclusions. Representative major findings of the study were that almost half of the 48 children scored higher on the Stanford Binet Intelligence Test than was thought possible, that learning disabilities frequently consisted of multiple, not single, intellectual dysfunctions, and that some children did not show a pre-established hierarchal order of skills. (CB)

ABSTRACT 42226

EC 04 2226 ED 063 714
Pub. Date 72 11p.
Dickerson, John N.
A Study of the Effectiveness of a Non-Specialist in Remediating Visual-Motor Skills in a Title I School.
South Bend Community School Corp., Indiana
EDRS mf,hc

Descriptors: exceptional child research; perceptually handicapped; perceptual motor learning; resource teachers; primary grades; learning disabilities; perceptual motor coordination; remedial instruction

The study was designed to experimentally determine the rate of growth as it pertained to visual motor development of an experimental and a control group by using a resource teacher as the vehicle to administer the remediation. The study lasted for 7 months. Beery's Developmental Test of Visual-Motor Integration was administered in a pretest and posttest format to 93 first grade students. The experimental group experienced the Frostig Developmental remediation materials using either the first level of the eye or motor coordination materials. The experimental group met in groups of about 11 children for a period of 30 minutes twice weekly. Seven samples of remediation are included in the form of photographs. Comparison of pretest and posttest scores showed that the experimental group gained 3 months of visual motor growth above the control group. The growth was considered statistically significant. (CB)

ABSTRACT 42249

EC 04 2249 ED 063 723
Publ. Date Jun 72 60p.
Simpson, D. Dwayne; Nelson, Arnold E.
Breathing Control and Attention Training: A Preliminary Study of a Psychophysiological Approach to Self-Control of Hyperactive Behavior in Children. Final Report.
Texas Christian University, Fort Worth, Institute Of Behavioral Research
Office of Education (DHEW), Washington, D. C., National Center for Educational Research and Development
EDRS mf,hc
OEC-6-71-0541(509)
BR-1-F-080

Descriptors: exceptional child research; hyperactivity; physiology; attention span; behavior change; learning disabilities; psychology; operant conditioning; reinforcement; feedback

The present study was undertaken as a preliminary evaluation of a psychophysiological method for training children in the control of hyperactive behavior. The method involves breathing control and attention training which employs biofeedback and operant conditioning principles designed to help the child develop control over excessive and distracting motor behaviors and maintain attention in learning situations. Since breathing records are highly sensitive to numerous behaviors relevant to the desired behavior pattern in learning settings, the use of respiration as a focal behavior in the training procedures sharply reduce the number of simple motor behaviors requiring monitoring and reinforcement in comparison to the typical behavior modification program. Six children (age 6 to 8 years old) from a private school for children with learning disabilities participated in the study. Three were assigned to a group given the breathing control and attention training and three were assigned to a control group. Measures obtained before, during, and after training included respiration indices, performance, attention and vigilance test scores, and teacher ratings of classroom behaviors. The study was concluded to be successful. (Author)

ABSTRACT 42345

EC 04 2345 ED 064 814
Publ. Date 72 127p.
Jordan, Thomas E.
Development and Disability at Age Four: A Prospective Longitudinal Study.
Missouri, University, St. Louis; Central Midwestern Regional Educational Laboratory, Inc., St. Ann, Missouri
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.

EDRS mf,hc
OEC-3-7-062875-3056 TR-9
OEG-0-70-1204(607)
BR-6-2875

Descriptors: exceptional child research; disadvantaged youth; socioeconomic influences; biological influences; preschool children; lower class; longitudinal studies; cognitive development; physical development; motor development

The report was explained to be one in a series of products designed to provide an inferential base for planning instructional strategies. Considered were biological and socially adverse states around birth and measures of attainment in three domains at the end of the preschool years. Early child development was first reviewed. The preschoolers examined were the 1966 cohort of 1008 infants who were 50% biological risk and 50% nonrisk. Criteria for selection of experimental subjects were disorders of pregnancy and gestation, delivery, neonatal effects, and any combination of these. It was hypothesized that the four categories of early developmental risk and social class were significant influences on child growth as measured in physical, motor, and cognitive domains at four ages of 36, 42, 48, and 54 months. The statistical model employed was multiple linear regression. Regressive models of development were compared. Predictors and criteria for each of the four ages were reported. The models were found to vary considerably in their capacity to account for criterion variance. Results showed that at 36 months, consideration of the three domains of development indicated that cognitive attainment was most predictable, and that at the later ages, social class was usually more influential than biological risks on cognitive attainment. (CB)

ABSTRACT 42815

EC 04 2815 ED N.A.
Publ. Date Sep 72 7p.
Sabatino, David A.; Streissguth, William O.
Word Form Configuration Training of Visual Perceptual Strengths with Learning Disabled Children.
EDRS not available
Journal of Learning Disabilities; V5 N7 P435-41 Aug-Sep 1972

Descriptors: exceptional child research; perceptually handicapped; visual perception; auditory perception; vocabulary; learning disabilities

The recent focus on the perceptual deficits of children with learning disabilities has led educators to ask whether an instructional program should be directed at a child's perceptual strengths or weaknesses. In the study, a sample of children with learning disabilities was divided into two groups, one with auditory perceptual strengths (audiles), the other with visual perceptual strengths (visiles). The differences between the strong and weak perceptual skills within each group were statistically significant. Other perceptual and language differences between the two groups were not significantly different. An experimental Word Form Configuration Training Program, which directed all teaching input through the visual modality, significantly modified the visual perceptual behavior and reading achievement of the visile and not the audile children in the experimental groups. (Author)

ABSTRACT 42909

EC 04 2909 ED N.A.
Publ. Date Oct 72 5p.
Fiedler, Margaret

Did the Clinic Help?
EDRS not available
Journal of Reading; V16 N1 P25-29 Oct 1972

Descriptors: exceptional child research; learning disabilities; reading difficulty; reading clinics; secondary school students; questionnaires; program evaluation; habit formation; reading ability; negative attitudes

The effect of a reading clinic on 29 secondary school students' poor reading habits and negative attitudes toward reading was investigated. Responses to reading related questions from an interest inventory were compared with responses to similar questions given on a followup inventory of the same 29 students who were then graduating from high school. At the time of clinic enrollment, the students' reading achievement was 2 or more years below the level indicated by age and intellectual capacity. Ten questions on matters such as reading habits, enjoyment of reading, and library use were posed. Responses were evaluated by comparing the quality of the student's original response with the response to followup questions and by categorizing the change in terms of maturity and appropriateness. Positive changes in reading attitudes and taste were reported for 72 of the 29 students. Analysis suggested that students change attitudes toward reading as skills increase, but have difficulty reflecting this in improved grades.

ABSTRACT 42920

EC 04 2920 ED N.A.
Publ. Date Sep 72 7p.
Cohen, Nancy J. and Others
Cognitive Styles in Adolescents Previously Diagnosed as Hyperactive.
EDRS not available
Journal of Child Psychology and Psychiatry; V13 N3 P203-209 Sep 1972

Descriptors: exceptional child research; learning disabilities; hyperactivity; adolescents; cognitive processes; problem solving; performance factors; learning characteristics

Four cognitive styles (reflection-impulsivity, field-dependence-independence, constricted-flexible control, strong versus weak automatization) were studied in 20 adolescent boys previously diagnosed as hyperactive and 20 normal controls. Diagnostic tools used were the Matching Familiar Figures Test, the Embedded Figures Test, and the Stroop Test. It was reported that the adolescent hyperactive child exhibited a pattern of inefficient approach to problem solving, especially to relatively novel tasks and tasks in which there was a greater degree of response uncertainty, similar to the approach of the young hyperactive child. Hyperactive children took less time to reflect over problems where a number of alternative solutions were available and had greater difficulty isolating a simple figure hidden in a complex background. compensatory training in impulse control and attention focusing was recommended for hyperactive children.

ABSTRACT 42927

EC 04 2927 ED N.A.
Publ. Date Spr 72 6p.
Haskell, Simon H.
Visuoperceptual, Visuomotor, and Scholastic Skills of Alternating and Uniocular Squinting Children.
EDRS not available
Journal of Special Education; V6 N1 P3-8 Spr 1972

Descriptors: exceptional child research; visually handicapped; visual perception; academic achievement; perceptual motor coordination; vision; childhood; testing

In order to investigate visuoperceptual, visuomotor, and scholastic skills of alternative and uniocular squinting children, 28 children ranging in age from 7 to 11 years were selected from routine referrals to a large eye hospital and were administered psychological, educational, and motor development tests. All tests were administered individually except for the Frostig Developmental Test of Visual Perception and the Young test on the intellect. Results showed that there were no significant differences between the mean scores of the alternating and the uniocular squinters on any of the variables. The outstanding handicap of all the children was thought to be one visuomotor incoordination. There was no evidence that the children's visuomotor disorder had been a handicap to their educational attainments, nor were there reliable differences between the groups in perceptuomotor and scholastic skills.

ABSTRACT 50010

EC 05 0010 ED N.A.
Publ. Date Oct 72 3p.
Vockell, Edward L.; Bennett, Blair
Birth Order, Sex of Siblings, and Incidence of Learning Disabilities.
EDRS not available
Exceptional Children; V39 N2 P162-4 Oct 1972

Descriptors: exceptional child research; learning disabilities; incidence; siblings

Records of 95 girls and 387 boys between the ages of 6 and 16 years who were classified as learning disabled were examined from the files of the Purdue Achievement Center for Children. Data were obtained concerning age, sex, IQ, ordinal position of birth, size of family, and age and sex of siblings. Results indicated that birth order or sex of siblings was not related to incidence of learning disabilities. (Author/CB)

ABSTRACT 50040

EC 05 0040 ED N.A.
Publ. Date Sep 72 7p.
Bersoff, Donald N. and Others
Effectiveness of Special Class Placement for Children Labeled Neurologically Handicapped.
EDRS not available
Journal of School Psychology; V10 N2 P157-63 Sep 1972

Descriptors: exceptional child research; neurologically handicapped; learning disabilities; grouping (instructional purposes); academic achievement; regular class placement

To measure the effectiveness of special class placement for learning disabled children labeled neurologically handicapped subsequent to psychological and medical evaluation, 376 NH students were exposed to one of three treatments: placement in a self-contained class for NH children, retention in a regular class with additional help from tutors 3-5 hours per week, and retention in a regular class with no extra help. After 18 months, effects of treatment on academic achievement and visual-motor functioning were compared; no significant differences among the three groups were found. The design of the study was evaluated within the framework of efficacy research. Discussed are the consequences of labeling and segregating children called NH where there is little genuine evidence of such dysfunction and little support for effectiveness of such a procedure. (Author/KW)

ABSTRACT 50098

EC 05 0098 ED 067 807
Publ. Date Sep 72 7p.
Cratty, Bryant J.
Children with Minimal Brain Damage: Prognosis for the Remediation of Motor Problems.
EDRS mf,hc
Paper Presented to the American Psychological Association Convention at Honolulu, Hawaii, September, 1972.

Descriptors: exceptional child research; minimally brain injured; motor development; psychomotor skills; remedial programs; learning disabilities; task performance; therapy

Reported was a program designed to explore the remediation of motor problems among minimally brain damaged children. In an initial testing session the children were exposed to a six category test of gross motor functioning, the first part of the Frostig Developmental Test of Visual Perception, a self concept test, a games choice test, and other tasks designed for the subjective evaluation of motor function. Children participated in classes which exposed them to tasks which both were taxing but able to be performed, as well as to tasks which were stressful to a slight degree. Conclusions such as the following were drawn: younger children with slight problems are most amenable to change; approximately 80% of the children referred were males; and hand eye control is improvable not only with the application of remedial measures involving practice, but also with the application of medication in hyperactive children. (GW)

ABSTRACT 50168

EC 05 0168 ED N.A.
Publ. Date Oct 72 9p.
Eaves, L. C. and Others
The Early Detection of Minimal Brain Dysfunction.
EDRS not available
Journal of Learning Disabilities; V5 N8 P454-62 Oct 72

Descriptors: exceptional child research; minimally brain injured; identification; screening tests; predictive measurement;

learning disabilities; kindergarten children; prognostic tests; test interpretation

Reported was a study on the basis of which researchers attempted to standardize a screening instrument to identify kindergarten children who can be expected to fail in school because of minimal brain dysfunction. The testing battery, called the Modified Predictive Index (MPI), consisted of 10 tests of the Predictive Index (de Hirsch and others), the Draw A Person Test, and Name Printing. The battery was administered individually by school psychologists or school nurses to 228 Kindergarten children. Of 49 children who failed the tests, 25 were matched with 25 controls and were examined in detail neurologically and psychologically. The MPI was found to be practical for identifying children needing special attention. It was found to be less useful for discriminating those children with minimal brain dysfunction from those who were thought to be immature. Neuropediatric and psychological investigations showed 11 of 25 (44%) of the failures to have unequivocal signs of minimal brain dysfunction. (Author/GW)

ABSTRACT 50173

EC 05 0173 ED N.A.
Publ. Date Oct 72 4p.
Rampp, Donald L.; Covington, Jan R.
Auditory Perception, Reading and the Initial Teaching Alphabet.
EDRS not available
Journal of Learning Disabilities; V5 N8 P497-500 Oct 72

Descriptors: exceptional child research; perceptually handicapped; initial teaching alphabet; reading; auditory perception; learning disabilities; educational programs; program effectiveness

Reported was a study of the effectiveness of a 40 week reading program using the Initial Teaching Alphabet (ITA) with 10 male students (8 to 12 years of age) who exhibited auditory perceptual disturbances. The ITA offered a consistent alternative to the inconsistent auditory-visual correspondences of traditional English orthography. The Gray Oral Reading Test was administered before and after the program to test reading progress. Scores were found to be significantly higher after the program. The stages of auditory blending and of transition to traditional orthography were found to cause the greatest difficulty. (GW)

ABSTRACT 50174

EC 05 0174 ED N.A.
Publ. Date Oct 72 3p.
McKnab, Paul A.; Fine, Marvin J.
The Vane Kindergarten Test as a Predictor of First Grade Achievement.
EDRS not available
Journal of Learning Disabilities; V5 N8 P503-5 Oct 72

Descriptors: exceptional child research; learning disabilities; identification; test validity; kindergarten children; diagnostic tests; prediction; academic achievement; Vane Kindergarten Test

The usefulness of the Vane Kindergarten Test (VKT) in the early identification of children with learning problems was tested. The VKT, which involves perceptual motor skills, vocabulary, and drawing a man, was administered to 213 kindergarten children. Results indicated that the VKT correlated significantly with the Stanford Achievement Test. However, the following reasons were given against continued use of the test: the obtained coefficients appeared to be too minimal to make educationally relevant predictions; the test had a ceiling effect when used with average to slightly above average ability kindergarten children; and the test might have the same ceiling effect related to the age of kindergarten students. (Author/GW)

ABSTRACT 50282

EC 05 0282 ED 071 212
Publ. Date 72 13p.
Clarkson, Frank E.; Hayden, Benjamin S.
The Relationship of Hyperactivity in a Normal Class Setting with Family Background Factors and Neurological Status.
Department of Health, Education, and Welfare, Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; hyperactivity; neurological defects; family characteristics; socioeconomic status; learning disabilities; elementary school students; age differences; medical evaluation

Boys (age 6-10 years, in regular classes) who were judged as hyperactive by their teachers were compared with matched non-hyperkinetic boys in terms of family background information and neurological functioning. Parent interview data were obtained on 109 hyperkinetic and 135 control Ss, while 121 hyperkinetic and 142 control Ss underwent pediatric neurological examinations. Parent interview data gathered included medical history, prenatal experiences of mother, the S's infant and preschool behavior, and socioeconomic status (SES). Although significant differences between groups were found on the neurological examination, there was a relatively low absolute incidence of neurological pathology and it was of a diffuse nature, consisting primarily of soft signs. This was seen to suggest immature psycho-physiological status, or developmental lag. Low SES was associated with hyperactivity in older (8-10 years) hyperactive Ss; disturbance in the family situation was present more often in hyperactive than in control S's families; low SES and high family disruption scores were related within the hyperkinetic group. Findings suggested that social and environmental factors become more relevant to hyperactive behavior as age increases. (KW)

ABSTRACT 50507

EC 05 0507 ED 071 232
Publ. Date Jun 71 41p.
Bruininks, Robert H.
Prevalence of Learning Disabilities: Finding, Issues, and Recommendations. Research Report #20.
Minnesota Univ., Minneapolis
Bureau of Education for the Handicapped (DHES/OE), Washington, D. C.
EDRS mf,hc
OE-09-332189-4533 (032)

Descriptors: exceptional child research; learning disabilities; research methodology; incidence; statistical data; identification; research reviews (publications)

The authors discussed common approaches used to identify school children with learning difficulties, examined past studies on the prevalence of learning disabled school children, surveyed methodological and conceptual problems in identifying children with learning problems, and presented recommendations for future prevalence studies. Prevalence projections of learning disabled children in various elementary school populations were discovered to range from approximately 1 to over 30%. Surveys using achievement expectancy formulas were found to report lower percentages (between 4 and 15%) than speculative estimates by authorities and studies of children achieving below grade level. Differences in defining criteria, instrumentation, methods of analysis, characteristics of samples, and quality and extent of instructional history were thought to account for the wide variations in the characteristics of children with reported learning difficulties. Recommendations such as the following were offered: variables should be selected for possible inclusion into prediction equations which minimize potential content overlap between the predictors and the achievement measures, and the criterion of disparity between predicted and actual achievement should vary according to the length of time the students have been exposed to systematic instruction. (GW)

ABSTRACT 50638

EC 05 0638 ED N.A.
Publ. Date Jan 73 6p.
Buckland, Pearl; Balow, Bruce
Effect of Visual Perceptual Training on Reading Achievement.
EDRS not available
Exceptional Children; V39 N4 P299-304 Jan 1973

Descriptors: exceptional child research; learning disabilities; reading readiness; visual perception; training techniques; perceptually handicapped; primary grades; reading ability

Studied was the effect of visual perceptual training on perceptual readiness and word recognition skills of approximately 166 low-readiness first grade children. The experimental group worked on Frostig worksheets. Under equally close attention of the teacher, control pupils listened to stories through a headset. Gains in perception, readiness, and word recognition outcome variables analyzed for experimental and control groups within 16 classrooms and between 4 pretreatment perceptual levels showed no significant differences in favor of the experimental group. (Author)

ABSTRACT 50762

EC 05 0762 ED N.A.
Publ. Date Nov 72 5p.
Vernetti, Carol Jean; Jacobs, John F.
Effects of Music Used to Mask Noise in Learning Disability Classes.
EDRS not available
Journal of Learning Disabilities; V5 N9 P533-7 Nov 1972

Descriptors: exceptional child research; learning disabilities; music; performance factors; mathematics; childhood; adolescents; academic achievement

Classical music was used to mask background noise in classes of children with learning disabilities. Fifty-three children (7 to 14 years old) in eight classes were given mathematics worksheets to complete while conditions of music and noise were alternated. The children served as their own controls. Each assignment was checked for accuracy and rate, and comparisons were made on the basis of age, mathematical difficulty, and intelligence, as well as overall group performance between conditions. No significant difference was found between the conditions, nor was there any noticeable interaction between the variables tested. (Author)

ABSTRACT 50765

EC 05 0765 ED N.A.
Publ. Date Nov 72 8p.
Hammill, Donald
Training Visual Perceptual Processes.
EDRS not available
Journal of Learning Disabilities; V5 N9 P552-9 Nov 1972

Descriptors: exceptional child research; perceptually handicapped; visual perception; research reviews (publications); reading comprehension; learning disabilities; training techniques; effective teaching

Recent research and writing were reviewed for the purpose of operationally defining visual perception, investigating the relationship between visual perception and reading comprehension, and determining the effects of visual perceptual training on reading and visual perception. Visual perception was defined as those brain operations which involve interpreting the physical elements of the stimulus rather than the symbolic aspects of the stimulus and which are usually referred to as visual discriminations and/or spatial relationships. It was concluded that little correlation existed between measures of visual perception and tests of reading comprehension and that training of visual perceptual skills, using currently available programs, has no positive effect on reading and possibly none on visual perception. (Author)

ABSTRACT 50767

EC 05 0767 ED N.A.
Publ. Date Nov 72 9p.
Levine, Maureen; Fuller, Gerald
Psychological, Neuropsychological, and Educational Correlates of Reading Deficit.
EDRS not available
Journal of Learning Disabilities; V5 N9 P563-71 Nov 1972

Descriptors: exceptional child research; reading difficulty; learning characteristics; statistical data; sensory integration; learning disabilities; childhood; psychology; neurology; academic achievement; multisensory learning

Forty-four children (mean age, 11 years) who were at least 1 year behind in reading ability were tested on 59 psychoneurological, psychological, and educational tests. Results were compared with previous research. Support was provided to show that reading disabled children could be classified as being predominantly analytic or nonanalytic in their styles of conceptualization. Evidence was also found to indicate that Ss had difficulty integrating stimuli from separate sense modalities. (Author/GW)

ABSTRACT 50782

EC 05 0782 ED N.A.
Publ. Date Dec 72 4p.
Stainback, William C.; Stainback, Susan B.
Effects of Student to Student Tutoring on Arithmetic Achievement and Personal Social Adjustment of Low Achieving Tutees and High Achieving Tutors.
EDRS not available
Education and Training of the Mentally Retarded; V7 N4 P169-72 Dec 1972

Descriptors: exceptional child research; underachievers; tutoring; peer relationship; academic achievement; learning disabilities; childhood; adolescents; mathematics; personal adjustment; social adjustment

The study investigated the feasibility of student to student tutoring as a means of arithmetic instruction in 120 children from 9 to 14 years of age of which 30 were high achieving tutors, 30 were low achieving tutees, and 60 were children of both high and low achievement who received regular teacher instruction. The results indicated that student to student tutoring is as effective in enhancing arithmetic achievement and personal and social adjustment of high and low achieving students in regular classes as having a teacher provide help on a one to 20 teacher pupil ratio. (Author/DB)

ABSTRACT 50894

EC 05 0894 ED N.A.
Publ. Date Jan 73 8p.
Hunter, Edna J.; Lewis, Hadley M.
The Dyslexic Child--Two Years Later.
EDRS not available
Journal of Psychology; V83 N1 P163-170 Jan 1973

Descriptors: exceptional child research; learning disabilities; dyslexia; childhood; followup studies; academic achievement; adjustment problems; failure factors

A followup study was reported on 18 male dyslexic children from nine to 13 years of age who were said to have been free of emotional and school adjustment problems two years earlier.
It was reported that none of the dyslexic children had overcome his reading disability despite remedial teaching; that the dyslexic children had lower achievement levels and more adjustment problems than the controls; that low scores on the full scale Wechsler Intelligence Scale for Children (WISC), the vocabulary subtest, and the coding subtest were associated with large reading deficits 2 years later; and that high WISC arithmetic and coding subtest scores were associated with large gains in reading skill. (See EC 040 530 for the original study.) (DB)

ABSTRACT 50999

EC 05 0999 ED N.A.
Publ. Date Dec 72 9p.
Anderson, William F.; Stern, David
The Relative Effects of the Frostig Program, Corrective Readin, Instruction, and Attention Upon the Reading Skills of Corrective Readers with Visual Perceptual Deficiencies.
EDRS not available
Journal of School Psychology; V10 N4 P387-95 Dec 1972

Descriptors: exceptional child research; learning disabilities; reading difficulty; perceptually handicapped; primary grades; remedial programs; program evaluation; visual perception; remedial reading; perceptual motor learning; Frostig

Studied were the effectiveness of the Frostig training program and corrective reading instruction for improving the reading and visual motor skills of 33 second grade pupils who possessed deficiencies in both areas. Each of the three teachers worked each school day for 16 weeks with the subjects of the two treatment groups plus a play placebo group. On the basis of the results of this study there is reported to be little, if any, support for the use of the Frostig program or corrective reading as treatments to improve the reading skills of children considered to possess a visual motor problem. Due to the performances of the attention-placebo group, it is logical to hypothesize that improvements of the remedial groups are more a function of personal attention than the unique remedial powers of the two treatments. It is suggested that consideration be given to the optimal number of Frostig sessions as well as to the possibility of a ceiling effect of the Frostig program. Eight weeks of training were found to be the maximum time before regression or improvement took place. (Author)

ABSTRACT 51081

EC 05 1081 ED N.A.
Publ. Date Feb 73 7p.
Camp, Bonnie W.
Learning Rate and Retention in Retarded Readers.
Journal of Learning Disabilities; V6 N2 P65-71 Feb 73

Descriptors: exceptional child research; learning disabilities; reading difficulty; childhood; adolescents; learning processes; retention; tutoring

The relationship between rate of learning and long-term retention was studied in 46 children (ages 8 to 18 years) with severe reading disability who were receiving tutoring in reading. The majority of indi-

vidual learning curves showed a characteristic pattern of initial acceleration followed by gradual deceleration. There was little change in rank order after the sixth lesson at each level of difficulty. The majority of the children showed learning curves said to be qualitatively similar to the learning curves of normal children. Significant rank order correlations between learning rate and three measures of retention were found. It was suggested that learning rate might be used as a basis for determining degree of original learning. (Author/DB)

ABSTRACT 51193

EC 05 1193 ED N.A.
Publ. Date Mar 73 5p.
Waugh, R. P.
Relationship between Modality Preference and Performance.
Exceptional Children; V39 N6 P465-69 Mar 73

Descriptors: exceptional child research; learning disabilities; perceptually handicapped; childhood; auditory perception; visual perception; performance factors; learning processes

The Illinois Test of Psycholinguistic Abilities was administered to 166 second graders who were classified as auditory or visual learners on the basis of discrepancies in individual test profiles. Four controlled instructional procedures were presented in classroom settings. Two procedures were primarily auditory and two primarily visual. The 5% of the objects showing greatest preference for visual tests performed equally well on visual and auditory learning tasks. Auditory learners performed equally well on auditory and visual tasks. (Author)

ABSTRACT 51256

EC 05 1256 ED N.A.
Publ. Date Mar 73 4p.
Espinda, Stanley D.
Color Vision Deficiency: A Learning Disability?
Journal of Learning Disabilities; V6 N3 P163-6 Mar 73

Descriptors: exceptional child research; learning disabilities; perceptually handicapped; learning difficulties; elementary school students; visual perception; color planning; males

Color vision deficiency was hypothesized to be associated with impaired learning and inappropriate classroom behavior and with a higher observed frequency of referrals to programs for the educationally handicapped. Diagnostic color vision screening was conducted in 11 elementary classrooms for the educationally handicapped (EH) comprising 83 boys and in an equivalent number of regular classrooms comprising 139 boys. Deficient color vision was found in 13% of EH and 5% of regular class students. The hypothesis that color vision deficiency was significantly associated with observable behavior patterns considered inimical to classroom learning was confirmed. (Author)

ABSTRACT 51259

EC 05 1259 ED N.A.
Publ. Date Mar 73 5p.
Becker, John T.; Sabatino, David A.
Frostig Revisited.
Journal of Learning Disabilities; V6 N3 P180-4 Mar 73

Descriptors: exceptional child research; learning disabilities; perceptually handicapped; kindergarten children; testing; test interpretation; visual perception; Frostig Developmental Test of Visual Perception

The investigation attempted to determine first, the correlations among the Frostig Developmental Test of Visual Perception, the Bender Visual-Motor Gestalt Test, and an experimental Visual Discrimination Test of Words and second, the visual perceptual factors that emerged when the data were treated factorially. The three visual perceptual tests were administered to 154 children from eight kindergarten classes. The orthogonally rotated variables for the present sample disclosed three visual perceptual factors: visual motor skills, figure-ground perception, and visual discrimination skills. An analysis of the specific correlates of the three selected visual perceptual tests suggested that the Frostig Developmental Test of Visual Perception is comprised of more than one general visual perceptual ability. The data supported the presence of three distinct perceptual behaviors measured by the Frostig Developmental Test of Visual Perception. (Author)

ABSTRACT 51260

EC 05 1260 ED N.A.
Publ. Date Mar 73 6p.
Hilsheimer, George Von
Creeping Reification: Functional Versus Symptomatic Treatment in the Diagnosis 'Minimal Brain Dysfunction'.
Journal of Learning Disabilities; V6 N3 P185-90 Mar 73

Descriptors: exceptional child research; learning disabilities; minimally brain injured; adolescents; classification; medical treatment; educational diagnosis; drug therapy; sleep; operant conditioning; nutrition

The term minimal brain damage (MBD) is evaluated in the light of several experiments on about 200 adolescents: no treatment in a democratic children's community; the effect of psychic energizers; electrosleep; biofeedback training for alpha wave desynchronization; deconditioning of phobias; and nutritional/medical treatment. The experiments showed statistically significant improvement in skills related to MBD. It is suggested that MBD may be a diagnosis which directs attention to symptoms and that treatment of underlying functions may be superior to present practice. (Author)

ABSTRACT 51316

EC 05 1316 ED N.A.
Publ. Date 73 117p.
Walzer, Stanley, Ed.; Wolff, Peter H., Ed.
Minimal Cerebral Dysfunction in Children.
EDRS not available
Grune and Stratton, 111 Fifth Avenue, New York, New York 10003 ($7.50).

Descriptors: exceptional child research; learning disabilities; minimally brain injured; childhood; psychological characteristics; social influences; neurology; genetics; identification; educational diagnosis; clinical diagnosis

Presented were eight studies concerning biological, psychological, and sociocultural variables associated with the syndrome of minimal brain dysfunction (MBD) in children. Genetic factors were discussed in terms of genetic heterogeneity, sex differences in the frequency of MBD, and pharmacogenetic analysis of MBD. Reviewed were developmental studies of monkeys who had been asphyxiated for 15 minutes which indicated the survival of normal adaptive behaviors after a significant delay period. Reported was a study of the electroencephalograms of MBD Ss which suggested a delayed maturation of the central nervous system in some MBD children. An article about lead poisoning in children discussed the neurologic implications of widespread subclinical intoxication. Explained was an interdisciplinary study of criteria for the identification and diagnosis of children with learning disabilities which involved psychoeducational evaluation, opthalmologic findings, and electroencephalographic and neurologic studies. Basic requirements for the neurologic assessment of children with MBD were formulated, and the method of free field observation and quantitative analysis was discussed. The clinical description, prevalence, natural history, etiology, and treatment of hyperkinesis were examined. Definitions and functional implications of MBD and synonymous diagnostic terms were compared, and a study exploring the relation of choreiform movements to behavior disturbances in a classroom of presumably normal children was reported. (GW)

ABSTRACT 51423

EC 05 1423 ED 074 651
Publ. Date (72) 8p.
Spidal, David A.
A Cooperative Parent-Teacher Model Using the Project LIFE Instructional System.
National Education Association, Washington, D. C.
Bureau of Education for the Handicapped (DHEW/OE), Washington, D. C.

EDRS mf,hc
Project LIFE Report 73-2

Descriptors: exceptional child research; learning disabilities; parent role; tutoring; instructional media; childhood; instructional materials; audiovisual aids; Project LIFE (Language Improvement to Facilitate Education)

Reported was an experiment in which the parents of an 8-year-old learning disabled girl used materials from the Language Improvement to Facilitate Educa-

tion (LIFE) Project in the home under the supervision of a classroom teacher. The S was presented with an average of two filmstrips each day over a 12-week summer period. Data indicated that the S steadily progressed through the instructional system in the order of visual perception, thinking activities, and language development. Thinking activity filmstrips were found to be especially helpful in indicating specific weaknesses in memory skill which were remedied by having the S repeat aloud the information indicated on given memory frames. It was reported that the S increased her vocabulary by a known quantity of 158 words, acquired new confidence, and learned to assemble new words into sentences. S' response to the Project LIFE program was said to be very positive and enthusiastic. The S' parents recommended that Project LIFE be used in the home by parents of learning disabled children to accelerate and complement classroom instruction. (GW)

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